Applied Language Learning

VOLUME 11 · NUMBER 1

2000 VOLUME 11 NUMBER 1

Applied Language Learning

Millennium Edition

Lidia Woytak
Editor

Joseph Morgan
Copyeditor

Professional Bulletin 65-00-1

2000 **Volume 11** **Number 1**

Applied Language Learning

Millennium Edition

PB 65-00-1

The mission of Professional Bulletin 65-00, *Applied Language Learning (US* ISSN 1041-6791), is to provide a forum for the exchange of ideas and information on instructional methods and techniques, curriculum and materials development, assessment of needs within the profession, testing and evaluation, and implications and applications of research from related fields such as linguistics, education, communications, psychology, and the social sciences.

Applied Language Learning, published semiannually by the Defense Language Institute Foreign Language Center and Presidio of Monterey, presents professional information. The views expressed herein are those of the authors, not the Department of Defense or its elements. The content does not necessarily reflect the official US Army position and does not change or supersede any information in official US Army publications. *Applied Language Learning* reserves the right to edit material.

By Order of the Secretary of the Army:

ERIC K. SHINSEKI
General, United States Army
Chief of Staff

JOEL B. HUDSON
Administrative Assistant to the
Secretary of the Army
9924202

DANIEL D. DEVLIN
Colonel, United States Army
Commander
DLIFLC and POM

Availability

To access *Applied Language Learning* on the Internet type:

http://lingnet.army.mil

Additionally, you may obtain the journal on microfilm from ERIC Clearinghouse on Language and Linguistics, Center for Applied Linguistics, 1118 22nd Street, NW, Washington, DC 20037.

Bulk rate postage is paid at DLIFLC. The basis of official distribution is one copy per training instructor and one per five military linguists.

Postmaster

Send change-of-address information to:

Applied Language Learning
Defense Language Institute Foreign Language Center
Presidio of Monterey, CA 93944-5006

United Parcel Customers

Location is:

Applied Language Learning
Tin Barn
Bldg. 518, Room 7
Presidio of Monterey, CA 93944-5006

Readers

Contact Editor, Dr. Woytak (ATFL-AP-AJ), *Applied Language Learning*
Defense Language Institute Foreign Language Center
Presidio of Monterey, CA 93944-5006
E-mail: woytakl@pom-emh1.army.mil
Telephone: (831) 242-5638 DSN: 878-5638
Fax: (831) 242-5850

Word-processing and Formatting ***Daniela Mahoney***

Cover Design and Graphics ***Barney Inada***
SFC David K. Dismukes

From the Editor

Reviewers for *Applied Language Learning*

The individuals listed below served as reviewers of manuscripts submitted to *Applied Language Learning* in 1999/2000. We express our gratitude for expert service to:

Martha S. Bean
San José State University
Donna Brinton
University of California, Los Angeles
Christine M. Campbell
Defense Language Institute Foreign Language Center
John B. Carroll
University of North Carolina
Marianne Celce-Murcia
University of California, Los Angeles
Tracey M. Derwing
University of Alberta, Edmonton
Dan Douglas
Iowa State University
Miriam Eisenstein-Ebsworth
New York University
Robert C. Gardner
University of Western Ontario
John S. Hedgcock
Monterey Institute of International Studies
Evelyn Hatch
University of California, Los Angeles
Eli Hinkel
Seattle University
Gordon Jackson
Defense Language Institute Foreign Language Center
Renee Jourdenais
Monterey Institute of International Studies
Stephen D. Krashen
University of Southern California
Masaki Kobayashi
University of British Coumbia
James F. Lee
University of Indiana
Ronald P. Leow
Georgetown University
Naoko Matsuo
Monterey Institute of International Studies
Murray J. Munro
Simon Fraser University
Denise Murray
San Jose State University
Paul Nation
Victoria University of Wellington
Wilga Rivers
Harvard University
Richard Schmidt
University of Hawaii-Manoa
David J. Shook
Georgia Institute of Technology
Richard Sparks
College of Mount Saint Joseph
Leo Van Lier
Monterey Institute of International Studies
Swathi Vamniavajan
San Jose State University
Maryann Weber
Missouri Southern State College
Dolly J. Young
University of Tennessee

Special thanks for coordination of the Millennium Edition to:

Mr. Rey Lane Aldrich
Foreign Language Proponency Office
United States Army

Lieutenant Colonel Stephen L. Butler, USAF
Provost Office
Defense Language Institute Foreign Language Center

Colonel Thomas Griffith, USAF
Office of the Chairman of the Joint Chiefs of Staff

Lieutenant Colonel Gordon T. Hamilton, USA
Command Group
Defense Language Institute Foreign Language Center

Dr. Imelda Idar
Office of the Chief of Naval Operations
United States Navy

Major Cathy M. Powalski, USMC
Public Affairs Office
Headquarters, United States Marine Corps

Lieutenant Colonel Jerry Renne, USAF
Public Affairs Office
Secretary of the Air Force

Applied Language Learning
Millennium Edition

2000 Volume 11 Number 1

Applied Language Learning
2000, Vol. 11, No. 1, pp. 1-4

Military Linguists for the New Millennium

Colonel Daniel D. Devlin
Defense Language Institute Foreign Language Center

For more than half a century the Defense Language Institute Foreign Language Center (DLIFLC) has provided the intensive foreign language training needed by United States of America's Armed Forces—Army, Marines, Navy, and Air Force.

Agencies outside the Department of Defense whose personnel have benefited from our Institute's training include the Department of State, the Department of the Treasury, the Department of Commerce, the Federal Bureau of Investigation, the Central Intelligence Agency, the Drug Enforcement Agency, and the National Aeronautical and Space Administration. International students representing the military services of many other nations have also studied at DLIFLC.

When the Institute (then known as the Military Intelligence Service Language School) was moved to the Presidio of Monterey in 1946, its planners understood that students of foreign language learn best in small classes conducted by instructors with native level proficiency. The small class made up of all services and all ranks is still our Institute's formula for success. Visiting educators quickly notice that each of our 750 classrooms is constructed to accommodate no more than 10 students and an instructor.

Colonel Daniel D. Devlin has served as Commandant of the Defense Language Institute Foreign Language Center (DLIFLC) and Commander of DLIFLC and the Presidio of Monterey since February 1996. He was commissioned an Army second lieutenant in 1969 following graduation from North Dakota State University, where he earned a Bachelor of Science Degree in History Education. He served in a variety of command and staff assignments. Colonel Devlin is a graduate of the DLIFLC Russian Basic Course, the U.S. Army Russian Institute, the USMC Amphibious Warfare School, the Army Command and General Staff College, and the Army War College. He graduated with distinction from the U.S. Naval Postgraduate School, where he earned a Master of Arts Degree in National Security Affairs. He also earned a Master of Arts in International Relations from the University of Southern California.

Under the guidelines of the Defense Foreign Language Program, subset of the Defense Language Program, DLIFLC begins the new millennium with four core missions. These are: (1) to provide foreign language education in support of national security requirements, (2) to conduct academic research into the language learning process, (3) to evaluate linguists' foreign language proficiency through standardized testing, and (4) to provide support to military linguists in the field.

At present, resident education at the Presidio of Monterey includes instruction in 21 languages. Basic programs are 25, 34, 47, or 63 weeks in length, depending largely on the degree of difficulty for a native speaker of English to learn the target language. About 2,100 students will complete basic programs at DLIFLC this fiscal year and receive graduation diplomas. Currently more than half of DLIFLC's students are enrolled in the lengthier programs.

In addition, through its Washington, D.C., branch, DLIFLC administers contract training in more than 50 languages in the capital and at other locations. This year some 520 students will complete this training. The programs include basic and specialized courses and conversion courses designed to develop a students' proficiency in a target language based on knowledge of a related language.

Studies show that the proficiency of DLIFLC's Basic Program graduates exceeds that of foreign-language major graduates of universities and colleges in the United States. A graduate of one of our 63-week programs has completed the university equivalent of 40 quarter units of foreign language study in the number of hours devoted to classroom study, language laboratory practice, and homework. Estimates indicate that DLIFLC conducts about 15% of foreign language instruction in the United States above the high school level. (In comparison, the largest percentage of nationwide instruction conducted at any single university or college rounds off to no more than 1%.)

For America's military, the closing years of the 20th century began an important era of planning for the future. *Joint Vision 2010,* developed by all services in 1996 and refined in 1997, is a conceptual framework for joint military operations of the future, with restructured forces supported as never before by technology. Linguists will provide the information superiority required to achieve full-spectrum dominance on the battlefield of the future. At DLIFLC, restructuring and technological innovation will enable our instructors to train linguists in numbers that America's military forces of the 21st century will require, and at the proficiency levels at which they will be required to perform.

Events of recent years indicate some of the likely challenges for America's military forces in the years ahead. Participating in ever-increasing interaction among peoples of diverse cultures and responding to such contingencies as ethnic disputes, regional crises, and acts of international criminality and terrorism all signal the growing importance of the military linguist. When communication matters most, the skilled linguist who grasps the contextual meaning of idiomatic expressions and specialized terminology often proves irreplaceable, as shown repeatedly in the century that just ended.

That is why language and cultural education is growing in importance across all our military services. As the American military is deployed in greater numbers and with greater frequency to support global operations, knowledge of languages and cultures has grown into a mission-enabling function of great importance.

Foreign language instructors of native proficiency will remain in demand, with computer-assisted instruction relieving them from lengthy drilling and other repetitive teaching chores. We have learned through experimentation at DLIFLC that a personal computer in the hands of each student can enhance both teaching and learning.

The enormous potential of the Internet to transmit current news, vocabulary, and societal and cultural information will continue to be explored for classroom and individual learning experiences. We have only begun to tap its resources for classroom use, and experienced instructors are developing new and exciting instructional uses. Distance instruction is the latest use of the Internet, and DLIFLC is determined to provide quality instruction via the Web.

Video teletraining will continue to grow in importance. At present seven studios at the Presidio of Monterey are in operation, transmitting language instruction to 13 field locations around the world. More than 7,600 hours of live interaction in 16 languages is conducted yearly. We schedule this instruction at hours required by linguists wherever they are stationed, not just during the instructors' normal eight-hour workday in Monterey. We hope to expand this operation vastly as additional stations for linguists become available around the world.

Distance education is so important to the DLIFLC mission that we recently established within our organization a School for Continuing Education, charged with administering all DLIFLC nonresident programs of instruction. The new school will ensure quality instructor support to nonresident programs without a negative impact on our resident programs.

The Institute's Faculty Personnel System, approved by the Department of Defense in 1996, has established faculty job titles and a salary structure aligned with those of foreign language educators outside the federal workplace. The system rewards merit and, because it is tailored for the Institute, it recognizes the unique nature of the work performed by DLIFLC's faculty. Talented instructors who find classroom teaching personally rewarding can remain instructors and obtain advancement formerly available to them only through leaving the classroom for administrative positions. In the years ahead the system will produce our Institute's best faculty ever.

As the new century begins, attitudinal shifts at our Institute are discernible. More of us are viewing students as customers of DLIFLC, not products. Also viewed as our customers are the commanders in the field who require the services of linguists trained at DLIFLC.

More than ever, former students are having an influence on DLIFLC's curriculum and methodology. The managers of the military's approximately 260 Command Language Programs, virtually all of them DLIFLC graduates, have been increasingly outspoken about DLIFLC training needs and methods. Through seminars and other networking they speak out on what DLIFLC is doing well and on what we need to improve, and their feedback and contributions are invaluable.

Today many DLIFLC graduates achieve Two Plus and Three Proficiency Levels on the Interagency Language Roundtable Scale, equivalents of the Intermediate and Advanced ACTFL (American Council on Teaching of Foreign Languages) Levels. Currently, over 50% of our students graduate on time in our demanding fast-paced programs. Others need more time to achieve the desired levels of proficiency. To assist those who need additional learning time, the faculty and staff of the Institute recommend extending all DLIFLC basic programs. This recommendation would solve a real problem. I fully support it. Extending a 63-week course to 75 weeks, for example, would give our students sufficient time to acquire a language. It would also provide sufficient time to implement improvements in the curricula. Consequently, more students would be graduating on time and thus, in the long run, money would be saved.

At the outset of the new century, our Institute is poised for change and for growth. In this Millennium Edition of *Applied Language Learning* we are very proud to offer guest editorials from leaders within all the military services, including General Henry H. Shelton, Chairman of the Joint Chiefs of Staff. I join with the editor of *Applied Language Learning,* Lidia Woytak, in expressing appreciation to each of them for responding generously to our invitation to address issues of importance to our readers.

Applied Language Learning
2000, Vol. 11, No. 1, pp. 5-8

Preparing for The Future
Joint Vision 2010 and Language Training

General Henry H. Shelton
Chairman of the Joint Chiefs of Staff

There is perhaps no more consistent lesson in military history than the need to understand the dynamic nature of warfare. The examples of nations that failed to heed this lesson are almost too numerous to mention, but one example provides a vivid sense of the immense importance of realistic preparation for battle. In August 1914, on the eve of the First World War, the prevailing belief in the armies of Europe was that frontal assaults against enemy positions would still produce victory on the battlefield. To be sure, there were those who believed that the more accurate, rapid firing weapons developed in the last half of the 19th century demanded new ways of thinking, but overall there was a fervent belief that mass armies and offensive operations would overcome all obstacles.

Even in the face of withering machine gun fire and thunderous artillery barrages that characterized the fighting on the Western Front, commanders who subscribed to the "cult of the offensive" launched assault after assault, making few concessions to the murderous defensive firepower blanketing the battlefield. The results were horrific. At the end of the first year of fighting, the casualty sheets listed the names of nearly a million men, and by the time the war ended in November 1918, over 8 million soldiers had died and millions more had been severely wounded.

General Henry H. Shelton became Chairman of the Joint Chiefs of Staff in October 1997. In this capacity he serves as principal military advisor to the President, the Secretary of Defense, and the National Security Council. Born in Tarboro, North Carolina, in January 1942, he received a Bachelor of Science degree from North Carolina State University and a Master of Science degree from Auburn University. General Shelton is a graduate of the National War College and the Air Command and Staff College. He has served in a variety of command and staff positions in the United States, Vietnam, and Saudi Arabia. The General wrote several articles for *Strategic Review*, i.e., "Contingency Operations in an Uncertain World: The Case of Haiti" (Fall 1998) and *for Military Review* "Winning the Information War in Haiti" (November-December 1995).

Joint Vision 2010

Much has changed since those blood-drenched trenches were abandoned and an armistice declared in 1918. Today, America's Armed Forces understand the dynamic nature of warfare and realize the high price that comes from being ill prepared for war. *Joint Vision 2010* (*JV 2010)* was published in 1997 to help the United States Military Forces deal with the radically different national security environment facing our Nation at the beginning of the new millennium.

Despite expectations to the contrary, the end of the Cold War, like the First and Second World Wars, did not result in a peaceful and benign world. But in contrast to the clear, monolithic threat that characterized defense planning during the decades of the nuclear standoff with the Soviet Union, we now confront diverse, yet still very dangerous and unpredictable challenges. The decade since the fall of the Berlin Wall has made it clear that the very real threats to American citizens and America's interests require the continued vigilance and presence of our military forces.

These new dangers range from ballistic missiles mated with weapons of mass destruction to sophisticated conventional weapons, as well as terrorists armed with deadly chemical and biological weapons. In addition, the information revolution sweeping through the industrialized world is creating unprecedented opportunities for sharing information, but at the same time producing new vulnerabilities.

With the embers of warfare still glowing in the Balkans, with obstinate despots like Saddam Hussein and Kim Jong-Il menacing their neighbors, and terrorists like Osama bin Laden threatening Americans, the world remains a dangerous and dynamic place.

Joint Vision 2010 provides the operational template for our planning to meet the demands of the future. Using the four operational concepts of dominant maneuver, precision engagement, full dimensional protection, and focused logistics, all enabled by information superiority and innovative technology, *JV 2010* will ensure that America's military can achieve Full Spectrum Dominance in any situation, from peacekeeping missions to high-intensity combat.

Preparing for the Future

While winning the Nation's wars will remain the primary focus of the Armed Forces, strategic and technological advancements have placed complex demands on the military. *Joint Vision 2010* highlights the need for quality people, professionals able to meet any challenge in this dynamic environment. Our military in the 21st century must be prepared for diverse operations in a variety of geographical and cultural settings. Forging a quality force demands training, which is the cornerstone of military readiness. Guided by rigorous

training and education, our forces can cope with the complex demands of high-intensity combat, as well as the equally challenging tasks associated with peacetime engagement and conflict prevention. The soldier patrolling the streets of Kosovo or Bosnia and the soldier patrolling the demilitarized zone in Korea both require extensive and expertly designed preparation.

A critical aspect of this preparation is a cultural awareness of the area of operations. We cannot train every soldier, sailor, airmen, and marine to be an accomplished and proficient linguist, but it is clear that language training will play a vital role in all of the armed forces. While language training in the past was heavily focused on the Soviet Union and its Warsaw Pact allies, today's world demands a wide scope of expertise and experience. A variety of positions require international expertise and language training, including assignments in security assistance organizations, at the embassies, the Unified Commands, Joint Staff, Office of the Secretary of Defense Staff, the Defense Intelligence Agency, and the service staffs.

Although language specialists play any number of important roles in these various positions, perhaps their most important function in the more complex and dangerous world of the future will be in helping to build coalitions. Success in forging an international coalition often hinges on personal relationships and an understanding of the nuances involved with a particular culture or country. While interoperability of equipment, compatibility of doctrine, and common operational procedures are essential, language proficiency is often the lubricant that makes coalitions work smoothly. Partnerships are built on trust, and this trust cannot be achieved just by buying the same radios or using the same codes. Trust is built on understanding. Language training not only provides the basic tools of understanding, but also furnishes insight into the perspective of different nations and cultures, essential ingredients in forging successful coalitions.

In the end, winning the wars of the future will continue to depend on the quality of our people. Not only the individuals in the tanks, foxholes, planes, and ships, but also on those who can communicate with our allies and translate the languages of those who would do us harm. General George S. Patton may have explained the value of people the best. "Wars are fought with weapons," he said, "but they are won by men. It is the spirit of men who follow and of the man who leads that gains victory." That was true in Patton's time, it is true today, and it will be true in the future, and it is absolutely vital in coalition operations.

DLIFLC

For the past 50 years the Defense Language Institute Foreign Language Center (DLIFLC) and its organizational forerunners have provided the language training for America's fighting forces. Long regarded as a center of excellence in its field, DLIFLC will continue to provide the expertise the military needs to serve the Nation well into the future. Since 1942, the Institute has sent more than 160,000 well-trained and dedicated graduates into the armed

forces. Their capabilities and competence continues to be the best testament to the school. While the methods for language training will continue to evolve as we move into the next millennium, the dedication and self-sacrifice of the people associated with DLIFLC will continue to shine brightly. Although language experts typically operate out of the limelight, they support U.S. policy in hundreds of ways with their unique skills. Never doubt that the President, the Secretary of Defense, all the Joint Chiefs, and the other leaders in the chain of command recognize and value this important service.

Conclusion

As the United States military prepares for the future using the concepts of *JV2010*, the foundation of our success will continue to be our great men and women in uniform. In the 21st century their knowledge, training, and experience will be more important than ever before.

In military operations, as in the computer business, it is the software that counts. Victory does not spring solely from sophisticated weapons or brilliant plans. Instead, it relies on the bravery, skill, and training possessed by our soldiers, sailors, airmen, and marines throughout the force. Their sacrifice, courage, and commitment are the true keys to our success. Through their efforts, we will remain prepared for any challenge our nation faces.

Applied Language Learning
2000, Vol. 11, No. 1, pp. 9-11

Meeting the Army's Language Needs

Lieutenant General Claudia J. Kennedy
Unites States Army Deputy Chief of Staff for Intelligence

The Army puts soldiers "on point" in countries around the globe in support of our national security objectives. The trained and ready force that will succeed in these deployments must have a thorough knowledge of the given operating environment. Fundamental to attaining even a small measure of full situational awareness in a foreign country is in-depth understanding of that country's native language. As such, foreign language proficiency becomes a critical enabling skill of the warfighter. This article presents a new strategy for meeting the Army's challenging foreign language needs as we enter a new millennium of change.

The former Cold-War era with its attendant predictability gave us almost five decades to refine and appropriately focus our instruments of national defense. Missions seemed unambiguous: Be prepared to fight and win a major land war in Europe. Such mission clarity gave our language force an easily definable orientation and concise language training strategy. Simply stated the strategy was to stay focused and increase competency in a narrow range of languages. The fall of the Berlin Wall essentially ended this set piece world and demanded reevaluation of our language strategy.

Lieutenant General Claudia J. Kennedy, the first woman to achieve three-star rank in the U.S. Army, has served as the Army's Deputy Chief of Staff for Intelligence since June 1997. Born in Frankfurt, Germany, she earned a Bachelor of Arts degree at Southwestern College in Memphis, Tennessee, and was commissioned an Army second lieutenant in 1969. Lieutenant General Kennedy has served in a variety of command and staff positions in the United States and Europe. She is a graduate of the U.S. Army Command and General Staff College and the Army War College.

Today we have an unstable world that continually prompts us to shift our focus and broaden our field of view. Planning for a major land campaign has given way to responding to many peacekeeping operations, replacing the European plain by global hotspots. We routinely project forces to diverse regions where we conduct ground operations amidst vastly dissimilar cultures and languages. These operational realities bring significant challenge to the Army language force both now and in the future. The U.S. Army is committed to meeting these challenges and posturing this force for success by ensuring it is properly focused, manned, trained, and equipped.

Our world is too large and diverse, and resources too limited, for the Army to maintain a global language expertise in the force. Specifying which languages to train and to what proficiency is a constant dilemma. As the Army's specified proponent for languages, I have finalized a comprehensive study of this problem. I have presented the results in the 1999 *Army Language Master Plan (ALMP)*.

The *Army Language Master Plan* is a requirement-based document that sets a definitive language mix for the Army. It is based on Defense Planning Guidance that tells us to "weight" our effort on major theaters of war while reserving capacity and practiced agility to accommodate a range of small scale contingencies. The ALMP gives long-term planning and programming guidance to the Army language-training base, the Defense Language Institute Foreign Language Center (DLIFLC). In the out years, the ALMP will undergo periodic review and requisite adjustment to keep the language force focused on meeting Army requirements. Further, it will provide the necessary underpinning for other elements of our language strategy.

The current environment of constrained resources no longer affords us a robust active-duty language force capable of meeting the full range of Army missions. The plan adjusts past manning practices to field a competent language force that will seamlessly integrate the linguistic expertise of Active and Reserve component soldiers with that of civilian contractors. The soldier-civilian partnership, with acknowledged limitations, is already working well. Responding to future language demands necessitates refinement of this partnership and pursuit of other creative initiatives.

Attracting greater numbers of recruits with foreign language expertise will enrich the partnership at reduced costs. Training our linguists in a second foreign language will facilitate their multi-apportionment and increase retention. Teaming our soldiers with civilian, coalition-provided, or host-nation linguists in standard training events will enhance language skills and improve interoperability procedures. Regularly assembling and exercising elements of this multi-faceted language force will play an important role in answering the near constant training requirement of the military linguist.

The process of attaining and maintaining foreign language proficiency exists on a continuum. Learning cannot end with graduation from DLIFLC or upon entry into the service under the Army Civilian Acquired Skills Program. Rather, foreign language proficiency is a unique skill that must be continually exercised and upgraded. Therefore, a "cradle-to-grave" training regimen that

will nurture a linguist's increasing exposure to foreign language through directed training opportunity is the responsible training course to follow.

Just as every soldier acquires additional military occupational specialty (MOS) and leadership skills with progression in rank and responsibility, the military linguist must develop commensurate language-related skills with advancement over time. Through structured training experiences at DLIFLC and challenging Command Language Program initiatives, we will ensure our soldier-linguists are able to function effectively in increasingly sophisticated language situations. These intermediate and advanced training experiences must incorporate the latest technologies to assist foreign language study.

The last component of my foreign language strategy is adept use of technology. There is a vast potential in this area. The DLIFLC has eagerly experimented with language training technology. It was an early user of computers in language training and one of the most successful employers of video teletraining in foreign languages. Currently DLIFLC is pioneering various web-based foreign language training programs. There are also many successes at the unit level where bright young soldiers have harnessed technology to reap great training efficiencies and record notable advances in language proficiency.

These experiences confirm that technology, when used in conjunction with a qualified instructor, holds tremendous application for language training at and beyond the training base. Our challenge especially as we construct a more mobile, responsive Army, is to stay abreast of advances in technology for use in training and operations. Only through aggressive pursuit of these initiatives will we put the best tools in the hands of our soldier-linguists. In tomorrow's environment, technology serving soldiers will be more pronounced than ever before. Our linguists must benefit from this service.

Foreign language proficiency will remain a critical enabling skill of the warfight. This tenet holds true across the full spectrum of armed conflict, throughout which soldier-linguists will serve with equal distinction in forward deployed divisional structures and in far removed joint and national agencies. Together they will help facilitate the successful prosecution of ground operations. The quality of their service in the next millennium will be a function of our collective ability to properly focus that language force, creatively man it, continuously train it, and correctly advantage it with technology. These challenges are formidable. Success is non-negotiable. The soldiers we put "on point" tomorrow deserve this standard and our full support in attaining it.

Applied Language Learning
2000, Vol. 11, No. 1, pp. 13-14

Language Skills in Expeditionary Aerospace Force

General Michael E. Ryan
United States Air Force Chief of Staff

As we enter the 21st Century, we find ourselves executing an expeditionary concept that focuses the United States Air Force on the business of rapid deployment in response to conditions ranging from humanitarian assistance to full-blown conflict. The Expeditionary Aerospace Force (EAF) concept describes who we are today and where we are going tomorrow.

Future missions and contingencies will require greater sophistication and understanding of the international security environment than ever before. To be viable, EAF requires people with language and cultural skills in place and ready, just as we need pilots, satellite operators, and jet engine mechanics.

Our experience in Operation Allied Force underscored our need to establish a cadre of professionals proficient in foreign languages and area studies—men and women who have the right skill sets to shape events or rapidly respond to contingencies anywhere in the world.

As Chief of Staff of the U.S. Air Force, General Michael E. Ryan serves as the Air Force's senior uniformed officer. With the other members of the Joint Chiefs of Staff he serves as military advisor to the President, the Secretary of Defense, and the National Security Council. A 1965 graduate of the U.S. Air Force Academy, where he received a Bachelor of Science degree, he has commanded at squadron, wing, and major command levels and has served in staff assignments at major command levels. General Ryan flew combat missions in Southeast Asia, including 100 missions over North Vietnam, and directed NATO combat operations in Bosnia Herzegovina. He is a graduate of Auburn University (Master's Degree in Business Administration), the Air Command and Staff College, and the National War College.

I applaud Colonel Mueller's call for a "culture of change" in the foreign language arena. His appeal is consistent with the changes occurring as we make the Expeditionary Aerospace Force a reality. The dawn of the new millennium is precisely the time for us to review our capabilities to meet the emerging new challenges. A world-ready USAF must have sufficient capability and depth in foreign language skills to sustain coalitions, pursue regional stability, and contribute to multi-national operations.

Indeed, we must learn from our past and invest in our future by developing the resources fundamental to fulfilling a leadership role in the New World environment.

Applied Language Learning
2000, Vol. 11, No. 1, pp. 15-24

Beyond the "Linguist"
Global Engagement Skills

Colonel Gunther A. Mueller
United States Air Force Academy

Despite occasional shortfalls and well-documented deficiencies in critical language skills, the United States Air Force (USAF) has generally met its linguist requirements. Nevertheless, during the Cold War internal and external critics continuously highlighted deficiencies in language skills, especially in the intelligence community. In 1993, for example, the House Select Committee on Intelligence wrote:

> The committee has long been concerned over the lack of qualified linguists in the intelligence community. Since 1981, the committee has expressed concern that shortfalls in critical language skills continue to exist in its high priority intelligence programs. What is more, the new world order poses a significant challenge to the DoD's ability to field language-proficient specialists capable of responding to unforeseen contingencies likely to occur around the world.[1]

The 1993 predictions and concerns were on target. Contingency operations and deployments now impact virtually all USAF members. In 1999 nearly 75,000 USAF members were deployed or stationed overseas. For this decade, the number exceeds one million. Additionally, USAF crews operate in about 80 different countries every day. Global engagement? You bet! Moreover, satisfying the yet-to-be-determined foreign language requirements of the Air Expeditionary Force (AEF) presents new challenges. It is clear that the current Defense Foreign Language Program (DFLP), focused on producing language "specialists," must be expanded to serve the unpredictable needs of the AEF and the more dynamic needs of the emerging national security requirements.

Colonel Gunther A. Mueller is Vice Dean of the Air Force Academy Faculty and Permanent Professor of Foreign Languages. A Distinguished Graduate from ROTC, he has served as a career Intelligence Officer in Thailand, Canada, Germany, Alabama and California. Colonel Mueller holds BA and MA degrees in German from West Virginia University and a PhD in Foreign Language Education from The Ohio State University. He is currently the Executive Director of the Defense Exchange Committee on Language Efforts, an organization dedicated to sharing language materials and language training ideas across government agencies. Col Mueller has actively participated in study groups, formulating foreign language policies for the USAF.

As part of the DFLP, the Defense Language Institute Foreign Language Center (DLIFLC) developed outstanding language courses to meet Cold War (primarily intelligence) requirements across the DoD. As documented in several official reports, however, the USAF has mismanaged people with language skills. Even worse, the USAF largely ignored language skills for officers during the Cold War. Although the Air Force required language proficiency for officers serving in attaché and intelligence positions, it often failed to provide the appropriate level of training. Countless anecdotes verify the mission limitations of officers assigned to language positions without the necessary language skills and regional expertise. In short, the Air Force has often mismatched (and continues to mismatch) officers and language positions. The personnel system views these language requirements as a nuisance and treats them accordingly.

> Beginning just after the Gulf War, the adequacy of Air Force officer foreign language proficiency and area expertise received a lot of attention. The USAF Inspector General, The DoD Inspector General, the General Accounting Office, and the 1995 Foreign Language Skills Process Action Team studied the issue. All found deficiencies that hampered mission accomplishment. [2]

Within the context of the AEF, the USAF must validate language needs and change current policies and practices to meet these new, more dynamic requirements. To that end, this article recommends a fresh look at language skills, especially for officers. Moreover, this article challenges the traditional notion of relying on "linguists" to serve Air Force language needs and suggests a careful review of how the USAF recruits, trains, motivates, and rewards people with these critical skills. Most importantly, this article advocates a culture shift regarding language skills and regional expertise. Such a culture shift would align recruiting and training programs with the new dynamic national security requirements.

Does the 21st Century USAF Need Foreign Language Skills?

For most people, "Future USAF" means advanced weapons…, F-22…, high-tech…, AEF…, smart bombs…, information warfare…, standoff operations…, space-based support…, contingency operations, and a myriad of other concepts. Language skills, on the other hand, would rarely make this list. Why? In general, the USAF has defined language skills narrowly in terms of intelligence requirements. Moreover, language skills for USAF officers, except for a small number of attaché and intelligence officers, have rarely been an issue. These skills are irrelevant for key career decisions (promotion, command, and assignments) because they do not matter. Why? Except for some rare circumstances, language skills have been "nice to have," not critical. Current personnel policies belie a firm understanding of language acquisition and maintenance issues and perpetuate the myth that we can "train" language proficiency as needed. Looking ahead, however, the Air Force must review its language capabilities and broaden its understanding of how language

proficiency together with cultural and regional awareness will contribute to the current national security strategy. The 1998 White House publication titled *A National Security Strategy for A New Century* states:

> The U.S. military plays an essential role in building coalitions and shaping the international environment in ways that protect and promote U.S. interests. Through overseas presence and peacetime engagement activities such as defense cooperation, security assistance, and training and exercises with allies and friends, our armed forces help to deter aggression and coercion, promote regional stability, and prevent and reduce conflicts and threats, and serve as role models for militaries in emerging democracies. These important efforts engage every component of the Total Force: Active, Reserve, National Guard and civilian. [3]

Participating in building coalitions, shaping the international environment, cooperating on defense, and training with friends and allies require a facility in international affairs. White (February 1997) states that according to DoD policy,

> Close and continuous military-diplomatic interaction with foreign government defense and military establishments is essential to develop and maintain the capability to engage in constructive, mutually supportive, bilateral and multilateral activities and relationships across the range of operations. [4]

To meet these goals, officers need foreign language proficiency and skills that go beyond normal expectations from "linguist" training. "Close and continuous military-diplomatic interaction" is best achieved through a thorough understanding of regional issues and is certainly enhanced by a facility in a foreign language. Our primary strategy should not rest on "doing the job" in English and through foreign interpreters and translators. The USAF Global Engagement Strategy absolutely requires the ability to engage on a personal level–that is what coalitions, multinational exercises, and confidence building are all about–personal communication based on mutual respect and mutual understanding. Continuing to operate in an English-only environment limits our ability to build stable relationships and effective coalitions, thereby thwarting national security objectives.

Air Force will need foreign language skills imbedded in cultural sensitivity and regional expertise. A cadre of trained Foreign Area Officers (FAO) to serve in a variety of language designated positions (LDP), requiring strong language skills and regional expertise, is now being developed. In 1998 the Deputy Chief of Staff for Personnel (DP) and the International Affairs (IA) of the Secretary of the Air Force (SAF) launched the Foreign Area Officer (FAO) Program.

A more daunting challenge, however, will be to provide the AEFs (and peacetime units), operators, commanders, force protectors, maintainers, judicial and medical experts. with some language skills and regional expertise to

compliment their primary function. While the Air Force has made great progress in ensuring that the "linguist" and FAO requirements are met, it has yet to address how it will develop air personnel in a variety of specialties who are also proficient in a foreign language and conversant in regional issues. The latter requires a fresh look at how we view these skills and a new model for ensuring their availability. In summary, the Air Force of the future will continue to need well-qualified, highly motivated linguist specialists to support intelligence- and information-warfare operations. The Air Force will also need language-proficient regional experts to serve as FAOs in various capacities. To satisfy the broader language/cultural needs (yet to be determined) of the "expeditionary airman," however, the Air Force must reexamine its entire foreign language training and maintenance philosophy.

Looking Back

Why has the USAF ignored language skills for other than traditional linguists? With English as the primary language of diplomacy, economics, and military operations, it was easy to get by. The USAF reflected national trends of declined interest in foreign languages. Cold War requirements were largely intelligence related, and the Air Force generally met its needs. Even for linguists, however, the USAF failed to provide sufficient opportunities for maintenance and improvement beyond the initial training at DLIFLC. Command Language Programs (CLPs), designed to motivate linguists to maintain and improve their skills, have generally failed to achieve that goal. Lack of time, inadequate training materials, and lack of incentives all have contributed to the problem. Additionally, competing personnel policies and shortages of trained personnel often have precluded maintenance and upgrade training. The greatest obstacle to improving overall language capability, however, has been the prevailing USAF culture, which does not recognize language proficiency as a valuable skill.

Language skills continue to be defined in intelligence terms. In fact, until recently, the system made no distinction between training a "linguist" and training an officer for attaché duty. Rightfully driven by intelligence requirements, this training model ignores the broader issues of culture and regional expertise. Also until recently, the prevailing training model emphasized listening skills over speaking and reading. This myopic view of language skills created personnel policies—alive and well today—that provide a "dose of language" enroute to overseas assignments. Even worse, for positions requiring language skills, those skills were often the lowest priority and, in fact, the language skills (or the level of skills) were often waived to get an officer in place. The Air Force can hardly expect this flawed training model to meet the needs of the immerging AEF.

Looking Ahead

> According to *Joint Vision 2010*,
> We must find the most effective methods for integrating and improving interoperability with allied and coalition partners. Although our Armed Forces will maintain decisive unilateral strength, we expect to work in concert with allied and coalition forces in nearly all of our future operations, and increasingly, our procedures, programs and planning must recognize this reality.[5]

The Expeditionary Aerospace Force of the *JV 2010* will deploy to all regions of the world. The United States will not always have stable agreements and relationships in place and our forces may not always be welcome. We will need assistance and cooperation, especially in the early stages of deployments, from local military forces. We will have to develop (and execute) multi-national plans. We will deploy for short-notice humanitarian operations and "come as you are" will become the standard preparation for many USAF operations. Moreover, since our primary national security goal is to avoid deployments through successful peacetime engagement, the better we engage, the more successful we become. "Tools of engagement" should include language proficiency and cultural awareness in the broader context of regional understanding. Recognizing the need for improved officer skills in language and area expertise, the DP and IA recently chartered an Integrated Process Team (IPT) to define the "global engagement officer." To that end, the IPT will recommend policies and programs designed to prepare officers to meet the politico-military demands of global engagement. The team will strive to increase cultural diversity and improve foreign language skills of the expeditionary airman.

> The Air Force is evolving into an expeditionary force to meet the demands of today's and tomorrow's security environments. Additionally, our national security strategy anticipates that when we fight, it likely will be as a member of a coalition. We are not just renting space anymore; we are building international teams. Teamwork takes trust and confidence. And trust and confidence require effective communication. [6]

Mutual respect and understanding, by the same token, will enhance that communication and strengthen that trust and confidence. Does the 21st century Air Force need foreign language skills and area expertise to help build effective international teams? Absolutely!

Current Status

Just-in-time language training in preparation for specific assignments of linguists, attachés, foreign educators, or special duty officers is the current training model. While this model works for predictable linguist requirements, it

does not fit the broader skills needed by the expeditionary airman. Addressing the needs of the global engagement officer, moves us away from the "just-in-time" training model toward a long-term, professional development perspective. By the same token, we must reexamine the adequacy of level two listening and reading skills for LDPs and review their assignment policies. The notion of giving officers a "dose of language" enroute to overseas assignments, requiring substantive interaction and negotiation with foreigners, belies a firm understanding of "what it takes." Even the most talented, motivated, and dedicated officers face daunting challenges in these assignments if they are armed with nothing more than level two language proficiency. This is especially true for the more difficult languages such as Chinese, Arabic, Japanese, Korean, or Russian. Clearly, the officers do the best they can. The opportunity losses of such deficiencies to the larger USAF mission, however, are difficult to measure. In most cases, level two language proficiency is not enough. Even worse, the officers who fail to achieve such proficiency gain the assignments anyway. The message? Language proficiency is not critical. This requirements-driven system with narrowly focused, short-term training has not served officer needs well and will fail to meet global engagement needs. Moreover, this system is inconsistent with *Joint Vision 2010*, which requires long-term commitments to "improving interoperability" and "working in concert with allied and coalition forces." The Air Force needs a new way of looking at language skills, and a new way of managing the people who have these skills.

Culture Change?

Just-in-time language training will not meet our needs! Language proficiency and cultural awareness for officers must be redefined as a professional development and *not as a training* issue. Doing so lays the foundation for building the kinds of skills the Air Force needs and can afford. The opportunities for career officers and senior leaders to deal directly with foreigners on an official or social level increase with every accession group and doing so in the foreigner's language can be a great "force multiplier." Senior officers will certainly never have six to twelve months to study at DLIFLC. Clearly, not all officers and certainly not all senior leaders will need language skills! That is not the issue. On the other hand, the Air Force should recognize language skills among young officers and make those skills count. It is essential that senior leaders (and especially the personnel system) recognize the difference in capabilities between the product of a six to twelve month language training program and those of officers who have maintained skills developed or acquired early in their career. In short, this distinction strikes at the heart of the current confusion and frustration over language skills. Just as the U.S. Congress has increased funding for Foreign Language Proficiency Pay (FLPP) from $100 to $300 per month, the Air Force must find ways of rewarding people with these skills. Something as simple as selecting (when possible) foreign PME candidates and exchange officers from the existing pool of language-qualified officers rather than sending an officer to DLIFLC in preparation for an assignment

would motivate officers to include language acquisition in their education. Otherwise, the assignments officer believes that "just-in-time training" is just as good. It is not!

Viewing language skills as professional development rather than training, prompts the Air Force to review recruiting, accession, training, assignments, and promotion policies. Slight changes (probably at low or no cost) in some of these policies could have a profoundly positive impact on improving foreign language skills.

Professional development implies identifying, first and foremost, the folks who have an interest or facility in language and providing them opportunities (consistent with USAF needs) for improvement. Young officers are easier and less costly to train and offer a much greater return on the investment. Moreover, in many cases the Air Force gets these skills free as ancillary preparation for commissioning through Reserve Officer Training Corps (ROTC) or U.S. Air Force Academy (U.S. AFA) programs.

The Air Force must convince young officers that maintaining their language skills is important. With few exceptions, young officers can now conclude that language skills are only important when the Air Force has a specific requirement and then it can either find (perhaps) or train (probably not!) to those needs. At this stage, proper "care and nurturing" of language skills is far more important than developing programs to gain more skills—in short, this culture change is the heart of the issue.

Progress

The 1995 Officer Foreign Language Skills Process Action Team (PAT) recommended 31 actions (many of which have been implemented) to improve the foreign language proficiency in the officer corps.[7] Generally, those recommendations advocated policies designed to build a pool of skills by focusing on young officers. Moreover, the recommendations encouraged viewing these skills more broadly than simply as tools for specialists. Essential elements of the recommendations included abandoning "just-in-time" training whenever possible. By the same token, generating a broad pool of skills distributed across many different career fields was seen as a better strategy. Following the notion that "young is better" the recommendations suggested expanding pre-commissioning opportunities and considering language skills in accession/recruiting decisions. In cases where accessions fall short of requirements, the PAT recommended training those who have an interest or academic background in language and broadening training to include some in-country immersion opportunities. Beyond administrative dimensions of tracking and using language information in assignment decisions, the PAT recommended providing language proficiency information to promotion boards. Understandably controversial, this recommendation has merit, but needs further exploration. From a language advocacy and whole person perspective, it seems reasonable to give promotion boards information on an officer's language skills. On the other hand, such a change would need to be implemented

cautiously and in the proper framework to guard against unintended consequences.

Some of the programs suggested by the 1995 PAT have been implemented. Through cooperation with SAF/IA and ROTC, the U.S. AFA has run (four-week) summer language immersion programs for 20 to 25 U.S. AFA and ROTC cadets each year for the past three years. Self-explanatory quotes from some recent participants follow:

> -The trip itself was by far one of the most educational and exciting experiences in which I have ever had the pleasure of participating.
>
> -An incredible experience which provides an amazing understanding of German culture and language.
>
> -The trip was a major bonding experience for both U.S. AFA and ROTC cadets.
>
> -I was provided with an amazing host family who talked extensively about not only Germany, but U.S. military impact in Germany. [8]

The input from such programs underscores the validity of "get them excited early" and obviously provides a foundation for future study. A similar program run by SAF/IA offers short-term language immersion opportunities to young officers, whose commanders can release them for three to four weeks, in-country experiences. These programs are the seeds of a new philosophy in language training. This training *is not for specific* jobs, but rather to build a pool of skills and encourage young officers to improve and maintain their skills. Small-scale, yes, but nevertheless powerful! From a cost perspective, moreover, these experiences are extremely inexpensive because they are imbedded in pre-commissioning programs. Effective, inexpensive, and motivational, these programs are a giant step in the right direction.

The Road Ahead

As stated in *JV 2010*, "Accelerating rates of change will make the future environment more unpredictable and less stable, presenting our Armed Forces with a wide range of plausible futures." [9] An Air Force culture change regarding language skills and regional expertise will help us train and equip officers to deal more effectively with the "wide range of plausible futures" in the international arena. Carefully reviewing Air Force missions in light of larger DoD and national security strategies will help to underscore why deeper, broader language skills and regional expertise are more important now than ever before. The notions of coalitions, partners, peacetime engagement activities, and "come-as-you-are" operations will further discredit the prevailing "just-in-time" language training model. By the same token, building and sustaining a two-tiered pool of officers with the right skills is an important step in improving language and area expertise capabilities. Toward that end, policies and programs to build the pool of FAOs are already underway and hold great

promise in sustaining a cadre of area experts with language proficiency. Less obvious, and more vexing, is the challenge of providing some language skills to a segment of the Total Force warfighters and to the support officers responsible for logistics, force protection, and medical assistance. The support of this second, larger tier of officers—the global engagement officers—for the AEF will undoubtedly be more effective with some language and regional orientation.

To help develop and sustain the global engagement officer, the Air Force must emphasize the importance of language skills in pre-commissioning programs by encouraging officer candidates to develop those skills when and where possible. Clearly, this should not be done to the exclusion of other critical fields in science and engineering, but rather, for those young people who already have an interest in or facility for language. The system needs to include language skills in the list of other important skills for Air Force officers like leadership, human relations, and technical competence. By the same token, attention to language skills and area expertise should systematically be enmeshed into the PME programs. At every PME level, interested officers should be given the opportunity to develop those skills voluntarily. Finally, if these skills really are important, they must be considered in career and force management decisions.

I recommend that the Air Force commit to expanding pre-commissioning opportunities through more low-cost summer language immersion programs, more ROTC scholarships for language and area studies, and inclusion of ROTC and U.S. AFA cadets in the DLPP. That is, encourage qualifying officer candidates to continue language study and maintain existing skills by paying them to do so. These dollars would undoubtedly have greater long-term impact than those now paid to more senior officers. As professional development issues, language proficiency and area expertise must be tied to PME. In fact, credit for PME seems overly restrictive and follows a "one-size-fits-all" model. If the Air Force were to broaden the notion of "professional development" beyond current PME programs, it could validate other experiences as professional development milestones. Short of that, both resident and non-resident PME programs should include language and area studies opportunities, perhaps through distance learning.

Rejecting the "just-in-time" training model and sustaining a pool of officers with language skills highlights the critical importance of language maintenance. While in-country immersion programs should be the first priority, well-designed distance learning courses can offer inexpensive and effective substitutes. To that end, I recommend energizing base education offices and their existing infrastructure to take the lead in ensuring that academic, immersion, and self-study opportunities are readily available to interested members. With some encouragement, proactive education officers could (and should) tailor language and area studies programs to their customers' needs. By networking with federal language programs and colleges, education offices could provide first-rate training and maintenance materials at relatively low cost. In the meanwhile, the Air Force could save training dollars and probably improve

overall language proficiency in the process by thoughtful nurturing of existing language skills.

Following recruitment (or training) of officers with language skills, the Air Force personnel system must improve its ability to assign them where needed. By recognizing the limitations of "one-shot" language training, the personnel system would be forced to make better use of existing resources. As an example, foreign/exchange PME experiences are most productive for officers who can engage and participate fully in the foreign programs. Expecting an officer to participate fully in the Japanese Defense College after only ten to twelve months of language training is at best unrealistic and at worst counterproductive. The Air Force must commit to building a reliable pool of skills among the war fighters and support officers and ensure that those skills, in the right quantities and at the right levels, are available to meet mission requirements. Perhaps even more importantly, those same skills can contribute to stable coalitions that will deter hostility and aggression, thereby minimizing the use of force.

In summary, USAF General Henry Viccellio Jr's (Retired) thoughts on officer foreign language skills capture the essence of the issue.

> Throughout our force, we need to establish a presence of officers proficient in foreign language and area studies. Our vision of the Air Force of the 21st century is global engagement, which mandates the capability to take immediate action—to deploy anywhere in the world, no matter how primitive the airstrip or how remote the location, in a few hours' time. In our globally engaged Air Force, there's no time for 18 months at the Defense Language Institute. We need people with language and cultural skills in place and ready, just as we need pilots and satellite controllers. [10]

As the Air Force changes to meet new missions, it must review its policy on language skills. Using outdated training models and flawed personnel policies will likely fail to meet AEF requirements. On the other hand, a thoughtful review of our new requirements would foster more enlightened policies to manage foreign language skills for the emerging global engagement officer.

Notes

[1] House of Representatives, Select Committee on Intelligence, Subcommittee on Legislation. (May 28, 1993). Washington, D.C.

[2] Global Engagement Officer Preparedness Program (GEO PREP), Program Integrated Process Team Charter. (July 26, 1999), Message, SAF-IA/AFAAO.

[3] *A national security strategy for a new century*. (Oct 1998). The White House.

[4] White, J. P. (1997). Service Foreign Area Officer (FAO) Programs Policy Letter. Ref: Chap 4, 303, 505, and 803 of title 10, United States Code.

[5] *Joint Vision 2010*. (1997). Washington, DC, Office of the Chairman of the Joint Chiefs of Staff, Pentagon.

[6] GEO PREP Message. (26 July, 1999)

[7] Mueller, G. A. (Dec 1, 1995). Foreign language skills process action team, *Report and recommendations*. Colorado Springs, CO: USAFA.

[8] USAF Academy Cadet Trip Reports. (1999, Summer). Colorado, USAFA.

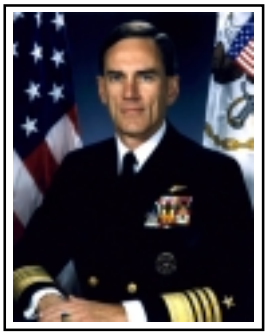
[9] *Joint Vision 2010*.

[10] Mueller, G. A. (1998, Summer), Global Skills, *Airpower Journal, p.* 12.

Applied Language Learning
2000, Vol 11, No. 1, pp. 25-27

Language Training and Naval Operations from the Sea

Admiral Jay L. Johnson
Chief of Naval Operations



Today's Navy and Marine Corps team is a combat-credible force that deploys overseas to project U.S. power and influence from the seas. On any given day, one half of the U.S. Navy's 315 ships are underway and a third are forward deployed. Naval expeditionary forces provide the vital forward presence that shapes the security environment, responds to crises, and prepares for combat. There simply is no substitute for being there.

As we have downsized the fleet by 40% in the past decade, our overseas commitments have increased. This has recently translated into an increased operational tempo and we see this trend continuing.

The current geographic and economic realities alone argue for the continued and increased relevance of naval forces in the 21st century. In a world where over two-thirds of the world's population and three quarters of the world's capitals lie within 500 kilometers of shore, and with 90% of the world's cargo traveling by sea, and the expected doubling in tonnage by 2010, continued unfettered access to the high seas, the littorals, and the world's major ports is obvious. Only combat credible naval forces can provide assured access.

Increasingly we see two dominant trends shaping the Navy of the 21st century. First, the revolution in information technology in naval operations, which has harnessed the power of the network to rapidly change how our forward-deployed carrier-battle groups and amphibious-ready groups train, operate, and fight. Second, having established our maritime dominance on the high seas, we have shifted our focus toward directly and decisively influencing events ashore.

Admiral Jay L. Johnson became Chief of Naval Operations in August 1996. A native of Great Falls, Montana, who grew up in West Salem, Wisconsin, Admiral Johnson is a 1968 graduate of the U.S. Naval Academy. He completed Navy flight training and was designated a Naval Aviator the following year. He has served in a variety of command and staff positions.

Concurrent with our investment in warships, aircraft, and submarines that will increase our reach inland has been an increased awareness of the valuable contributions of our enlisted linguists and Foreign Area Officers (FAO). Our linguists ensure that our forward-deployed naval forces receive the most accurate, timely, and comprehensive intelligence. Our FAOs are warfighters who possess the skills required to manage and analyze politico-military activities with an in-depth understanding of the underlying economic, social, cultural, psychological, and political factors.

Using their unique combination of professional military skills, regional expertise, language competency, and politico-military awareness, FAOs advance U.S. interests in a country or region and enhance the effectiveness of Navy interactions with foreign navies and military organizations. Said another way, FAOs are the face of the Navy to our allies and coalition partners, both at sea and ashore.

In a world marked by increasing globalization, and a rising tendency for nations to work together in coalitions, FAOs provide the vital insight into the cultural, political, and legal issues which facilitate the consensus building so critical to a coalition's cohesion. They enable the rapid understanding of the unique perspectives and capabilities each nation brings to a coalition.

Today over 1,300 officers and enlisted personnel require language training. The nature and level of proficiency varies from fluency for linguists to basic competency for certain FAOs. We seek to turn the challenges of foreign language training into opportunities to provide the right training at the right time to the right person.

Building upon our long partnership with the Defense Language Institute, Foreign Language Center (DLIFLC), we seek to leverage the technology of industry to improve our language instruction to the fleet. For instance, artificial intelligence can be used to personalize instruction to meet individual learning strategies. It has been shown that student-computer interaction allows for greater student control of pace, sequence, and context while learning a target language.

Artificial intelligence systems have enhanced students' written comprehension by providing tutorials on semantic content and conceptual writing. The increased technological sophistication of voice recognition and transmission enriched previously repetitious exercises and paved the way to improve a student's pronunciation. Instructional interactivity allows quicker mastery of non-verbal and cultural nuances of foreign languages.

The Navy's Information Technology for the 21st Century (IT-21), initiative will link all carrier and amphibious forces at sea via an encrypted, satellite-linked Internet by 2003. Already, sailors on deployment participate in distance learning, receiving college-level instruction via video-teleconferencing.

IT-21 and its counterpart ashore, the Navy and Marine Corps Intranet (NMCI), will deliver the means to provide broad access to language training in the fleet. Combined with CD-ROMs and web-based instruction, these media will make it possible to deliver language curricula to our sailors on assignment both ashore and at sea. Our men and women will be able to upgrade their

proficiency, master a regional dialect, and request assistance from subject matter experts while forward deployed.

Technology is an important part of our language instruction vision. But there must be a balance struck between the opportunities technology provides and the time-proven tenets of language instruction theory. Key to this vision is our partnership with DLIFLC. The Institute has always been at the forefront of Navy language training. It has played a key role in developing the skills of our linguists and selected Foreign Area Officers. We will continue to work with the DLIFLC faculty and staff to leverage their skills and capabilities in providing the best training, in the most efficient, timely, and economical means.

Even as we seek to ensure the highest quality instruction, we must never lose sight of the sailors who will use their foreign language proficiency to support naval operations from the sea. They are the reason we are the greatest Navy the world has ever seen, and we owe it to them to ensure that their language training and education are the finest available in the 21st century.

Applied Language Learning
2000, Vol. 11, No. 1, pp. 29-31

Marine Corps Language Needs in the New Millennium

General James L. Jones
Commandant of the United States Marine Corps

Throughout our nation's history, Marines have been routinely forward-deployed throughout the world. Today, forward presence has translated into daily operations that touch the majority of the world's peoples. Maintaining a global perspective, the Marine Corps has always focused on our role as a crisis-response force. Consequently, Marines are deployed into environments of diverse cultures and unique languages and dialects. Key to success in this unpredictable atmosphere is a level of cultural and language expertise that can help shape the modern battle space. Our challenge is to train and maintain a core of Marine linguists that can perform in myriad roles from intelligence specialists and interpreters to foreign area officers and attaches.

One of our challenges has long been the proper method to train and maintain adequate numbers of Marines in the proper languages at the proper time to meet the needs of the Marine Corps. Yet, in this era of rapid and unprecedented global change, the current need for highly skilled linguists is rapidly reaching beyond the capacity of our traditional methods of linguist recruiting, training, and retention. To prepare for the new millennium the Marine Corps and the Defense Language Institute Foreign Language Center (DLIFLC) are developing innovative ways to ensure that we continue to leverage every available asset to meet this challenge.

General James L. Jones became Commandant of the Marine Corps in July 1999. Born in Kansas City, Missouri, in December 1943, he spent his formative years in France and returned to the United States to attend Georgetown University School of Foreign Service. He earned a Bachelor of Science degree in 1966 and was commissioned a second lieutenant in the Marine Corps in January 1967. He is a graduate of the National War College. He has served in a variety of command and staff positions in the United States, Asia, and Europe.

In a time of manpower reductions and increased operational commitments, the Marine Corps has pursued innovative ideas pertaining to management of existing resources. Following the Persian Gulf War, we implemented a complete retooling of the Marine Corps intelligence structure. This plan, referred to as the "the Marine Corps Intelligence Plan," resulted in a dramatic increase in the number of linguists trained at DLIFLC. In fact, over the course of the last five years the Marine student population at the Institute has increased by over 200%. Additionally, in response to Marine Corps specific language training requirements, DLIFLC provided critical expertise in establishing a first of its kind, tailored satellite language training program in support of riverine operations. This school, established on-site at Marine Corps Base Camp Lejeune, provides commanders with the immediate capability to provide specially tailored language training for select Marines identified for riverine operations. These innovations are prime examples of the success of the partnership between the Institute and the Marine Corps Foreign Language Program (MCFLP) in adapting to fulfil the expanding need for language training.

The cultural diversity of our Corps, combined with the nature of our forward-deployed forces, places the Marine Corps in a position to tap a variety of unique sources. Cultural area expertise and in-country language training provided to our Marines operating worldwide in U.S. Embassy Marine Security Guard Detachments make them a source of unique expertise for future operational employment. In this regard, significant progress has been made in our ability to identify Marines with these unique skills. Additionally, the Marine Corps has plans to implement an improved method to identify, test, and track heritage language speakers early in their military careers. By assigning an additional military operational specialty (AMOS) of Interpreter and offering foreign language proficiency pay to qualified heritage speakers, a vast resource will be properly identified for operational use when appropriate. This pool of linguists can then be used for operational interpretation and translation tasks, acting as a force multiplier, freeing intelligence linguists to perform in their primary military operational specialty. Already the benefits of these initiatives are greatly exceeding our initial investment.

Because of the length of language training, one of the most dramatic and effective means of cutting costs is to decrease the level of academic attrition. Increasing the number of first time graduates and thereby decreasing roll-back time dramatically cuts costs and significantly reduces the initial training pipeline, resulting in more Marines available for service in the operating forces. The MCFLP is experimenting in truly innovative approaches to traditional linguist recruiting and training, all with the purpose of making better linguists, with a greater likelihood of long-term retention.

Over the last year, Marines have been carefully screened and placed into any one of several assignable language training programs by the Marine Detachment Commander on ground at DLIFLC. The cornerstone of this new process is an innovation called the Learning Assessment Map Profile (LAMP). The LAMP is a learning assessment tool administered in one 30-minute session upon the arrival of students at the Institute. It allows placement of Marines

into the language most likely to engender success. The LAMP provides a detailed profile of an individual's cognitive learning style by highlighting significant strengths and weaknesses. Results of this assessment can then be used at DLIFLC to provide for individual pre-instruction and corrective mid-course counseling which can identify and solve potential academic problems before they would result in disenrollment. Additionally, Marines can use this tool to tailor an individual approach to language maintenance study and to enhance future performance.

Using this assessment in the education process is truly an example of innovation and has vastly improved efficiency. During the past year the Marine Detachment at the Institute has lowered its academic attrition from 18.8% to 3.7%. This "bottom line" significantly reduces re-training costs and means more Marine linguists in the operating forces.

In the 21st century, Marines will continue to operate as we always have, responding worldwide to a variety of threats to our national interests. As a forward-deployed force in readiness, the Marine Corps operates in support of American interests and will continue to rely heavily on its core of highly trained and professional linguists. We are confident that DLIFLC will continue to play its vital role in the success of the Corps in the 21st century.

Applied Language Learning
2000, Vol. 11, No. 1, pp. 33-73

Leading the U.S. Army into the New Millennium
Interview with General Dennis J. Reimer

Lidia Woytak
Defense Language Institute Foreign Language Center

General Dennis J. Reimer, the 33rd US Army Chief of Staff (1995 to 1999), put his creed "soldiers are our credentials" into action and words (Reimer, 1995). He has turned the Total Army concept into a huge success. The Total Army met the challenges in Kosovo, Iraq, Somalia, Haiti, Vietnam, and Korea. Hailed as a "steward of change," Reimer has modernized leadership and training doctrines. Just in time for the Third Millennium, he has helped lead the Army from the industrial age into the information age.

Today, the General serves as a Distinguished Fellow for the Association of the United States Army (AUSA) in Arlington, Virginia. The AUSA Members discuss a variety of issues pertaining to the U.S. Defense Policy debate. They also seek to improve the quality of life and professional development of the Total Force—Active, Guard, Reserve, civilian, and family members. Moreover, AUSA members talk to students about the international situation confronting the country and the Army's role in securing America's global interests.

The ability to change an institution emerges as a major challenge for the 21st century leaders. General Reimer agreed to share his views on the institutional change with the readers of *Applied Language Learning.* In this interview, the Chief of Staff discusses credentials of a leader, changing challenge into opportunity, and importance of predictability.

General Reimer is a third-generation American born into a hard-working family in a small town in an Oklahoma farming community. In 1958 he left home for the U.S. Military Academy at West Point. He graduated four years later with a Bachelor of Science in Engineering. Subsequently, he continued his studies at Shippensburg State College earning a Master of Science in Public Administration. In both institutions, in addition to engineering and administrative skills, he learned to manage time.

On May 12, 1962, he listened to General Douglas MacArthur giving his last speech at West Point. In this speech titled "Duty, Honor, Country," General MacArthur talked about his life-long love for the military corps, the nation's military history, and the nation's future of satellites and space ships to the moon (Perret, 1996).

This memorable speech served as a testimony to MacArthur's patriotism and fearlessness and greatly inspired Reimer and his colleagues. It committed Reimer forever to the Army. Throughout his military career, the General would frequently quote MacArthur's words of that evening in his

speeches and articles. Even during this interview, 37 years later, Reimer still would quote him.

Hardships

General Reimer frequently refers to the battlefields of the American Revolution and Civil War in his speeches. In many ways, the general faced the same hardships as leaders of the American Revolution.

America of the 1990s and 1770s has been characterized as prosperous. Peace in the 1990s and $780 billion gained from the defense cuts have poured money into the national economy. Booming economy has created new jobs. Currently over 95% of the population are employed. NASDAQ and other stock exchanges have created new moguls, Silicon Valley of California has produced scores of millionaires and occasional billionaires.

In a similar vein, people living in the thirteen colonies of America of the 1770s were satisfied. Richard Oswald, an English traveler, testified before Britain's Parliament about the people of America, "They are the happiest farmers. The climate is good and hitherto taxes have been easy. The provisions (food) are under half the value (price) of England" (Ketchum, p. 57).

However, these relatively prosperous times had a negative impact on recruitment quotas; both were too low. Leaders of the American Revolution complained about the lack of soldiers. During the revolution, Benjamin Franklin and Thomas Jefferson traveled several times to Europe to hire soldiers. During the 1990s, the Army used an advertising agency to recruit more people.

The U.S. Army of the 1990s, in some respects like the Army of the American Revolution, was getting smaller and poorer every year. During the Revolutionary War, many soldiers were unpaid. Others lacked weapons, uniforms, and equipment.

Two-hundred-twenty years later, soldiers were still getting low pay, forcing some military families into food-stamp programs. Sometimes they had to use outdated equipment. Some soldiers experienced family problems due to frequent overseas assignments. "Increased deployments coupled with the drawdown have created a feeling of uncertainty within our soldiers," Reimer said (Gilmore, 1998).

General Reimer has led the Army through tough times. Due to budget cuts, the Army had to reduce the Total Army by 630,000 people and close 700 facilities. Moreover, the General had to curtail modernization of the Army by eliminating or restructuring over 100 programs. In his October 1998 address to the Press Club, he said that the Army budget was the lowest since the start of World War II. General Reimer and his soldiers were becoming weary of a catchy slogan "Do more with less." The lean years have taken a toll on soldiers. "When is it going to stop?" they would ask.

Thomas Paine wrote on 23 December 1776 in *The Crisis*, "These are the times that try men's souls. The summer soldier and the sunshine patriot will, in this crisis, shrink from the service of his country; but he that stands it *NOW*, deserves the love and thanks of man and woman" (p. 58). These words would also be relevant to General Reimer and his soldiers. Despite all these

hardships, the military was going through an educational and physical transformation.

New group dynamics were taking over the entire Army. At the Defense Language Institute Foreign Language Center (DLIFLC), young soldiers who were occasionally helping me told me that the peer pressure to drink on weekends in the barracks had been replaced by pressure not to drink. Many of them had three to four years of college education, experience with computers, and most importantly, seemed to believe in themselves and their capabilities.

The Army's diversity of the 1990s is rooted in the American Revolution. Many women and minorities participated in the Revolution. Frequently, women took care of the sick and wounded, sometimes they fought alongside of men. Some European officers continued their quest for freedom they lost at home on the shores of the New World. General Casimir Pulaski, the Father of American Cavalry, gave his life for freedom on a Savannah battlefield.

General Reimer to whom "America is a superb lesson in pluralism" has promoted diversity in the U. S. Army. During his watch, Equal Opportunity Advisor positions for every brigade and representatives for every company were established. The percentage of minorities and females in the Army is steadily rising. According to Defense Equal Opportunity Newsletter of March 1999, 41% of Army personnel were minorities (Blacks, 27%; Hispanics, 7%; Native Americans, 1%; Asian Americans, 3%; and other, 3%) and 15% were females. At the same time, the ratio of female Army recruits rose to 20%. Some minorities have risen to high posts in the U.S. Army. Currently, General Eric Shinseki (an Asian American) serves as Chief of Staff and General Claudia Kennedy (a female) serves as Deputy Chief of Staff for Intelligence. At the Institute, a female soldier, Command Sergeant Major Debra Smith, heads the entire enlisted force.

The General has promoted guiding young soldiers through common youth pitfalls. Chaplain L.E. Arnold and MSG D. Sullivan (1998) in "Consideration of Others Handbook" guide how to share mutual respect and empathy in a small group-instruction.

Total Army

General Reimer built the Total Army team to make up for the small Army. Thus he turned a challenge into an opportunity. The Chief of Staff stated during the interview that the Total Army consisting of the military (active, guard, and reserves), their families, and civilians—benefits the Army and the society at large. He explained that the shrinking active Army alone cannot respond to two or more major conflicts on a 24-hour call. An active Army, sufficient in size to such a call, would be too inefficient and too costly to maintain.

During the past decade, the Army—in addition to conventional military operations—has been involved in a variety of international peacekeeping operations involving engineering, medical, and judicial expertise. Having realized that the active Army alone could not carry out all these tasks, the General

called on reservists, other services, and civilians for assistance. In the 1998 White Paper *One Team—One Fight—One Future*, he described integration of active duty divisions with National Guard Divisions. In "Joint Warfare and the Army-Air Force Team," Dennis J. Reimer and Ronald R. Fogleman (1996), Army and Air Force Generals, wrote that joint efforts of the services increase power on the battlefield. Services complement each other by offering distinct war-fighting capabilities on land, at sea, and in the air.

Challenges

General Reimer has met every challenge throughout four decades of active service. On behalf of the Army, he was called to bring stability into the new post Cold-War world which some described as long on "new" and short on "order."

Some nationalities, ethnic groups, and individuals viewed the end of the Cold War as an opportunity to assert themselves and expand their power by imposing on their neighbors and their own people. In some places, changes were done diplomatically. In other places, such as the former republics of Yugoslavia, violence replaced diplomacy. In the interview, the General pointed out that hostilities that had remained frozen for hundreds of years now became activated. He participated in sending active and reserve units on missions to Bosnia, Kosovo, and Macedonia.

In the early 1990s, as the Deputy Chief of Staff for Operations and Plans, he helped plan and support the massive movement of forces in the Gulf Region during Desert Shield and Desert Storm. Drawing on that experience, in the late 1990s, the General provided joint advice to the operation Desert Fox.

In the 1980s, he served in Korea as the Chief of Staff of combined Field Army and Assistant Chief of Staff for Operations and Training. Afterwards, he reinforced and maintained the Army's overseas presence in Europe, Asia, Central America, and Africa.

In the 1960s, he fought in the rice paddies of Vietnam. He served two combat tours in Vietnam; one as an advisor to a battalion of the South Vietnamese Army, and the other as an executive officer for an artillery battalion in the 9th Infantry Division.

Simultaneously, the General participated in the Army's global assistance to people trapped in natural disasters such as the 1999 flood in Latin America. The same year, Reimer participated with the U.S. troops providing earthquake relief in Honduras.

In 1996, General Reimer ordered the engineers of the Total Army to assist flood victims in the Midwest and the South. Further they were to provide earthquake and flood relief as well as to fight forest fires in the West, and to fight the flow of illicit drugs on the borders. In March 1997, the Chief of Staff visited California to assess damage caused by El Nino floods. He engaged the Total Army engineers in overcoming the damage. In Monterey County, for example, cut off from civilization by a washed away bridge, the Army built a temporary highway bridge in a matter of days. The Army personnel provided

water and transportation for residents cut off from civilization by floods. Thus, the Army brought stability to the flood-ravaged California and, in the process, saved the nation four billion dollars.

For meeting, eye to eye, all these challenges, General Reimer was awarded the Defense Distinguished Service Medal, the Distinguished Service Medal, two Legions of Merit, six awards of the Bronze Star Medal (one with "V" symbol for valor), the Purple Heart, the Combat Infantryman Badge, and the Ranger Tab.

Leadership

Some view leadership as a process of persuasion, others as means of managing status quo or enforcing a blueprint. By contrast, General Reimer views leadership as a dynamic spiral process of change and opportunity. In 1997, to promote merit advancement, the Army implemented the new *Officer Evaluation Report* (OER) offering change and opportunity to its force. The previous report, developed during personnel reductions, tended to inflate qualifications of the subordinates. As a result of this report and other factors, a "zero-defects" mentality came into play. According to Reimer, this mentality had a negative effect on performance. For fear of making a mistake, subordinates would stop short of experimenting or taking prudent risks. The new OER was part of a major effort to deal with the "zero defects" mentality.

"Leadership is all about change," stated Reimer during the interview. Changing the Army without losing sight of need for continuity and stability, he views as a challenge for leaders. About "managing status quo," he comments, "there's nothing to it." He believes that any person can acquire leadership skills through training and education.

As a result of extensive research, General Reimer published the US Army Field Manual (FM) 22-100, *Army Leadership* (1998) to which officers and enlisted personnel of all ranks provided insights. In addition to *Army Leadership,* the Chief of Staff also presented his views in several articles in *Military Review*, e.g., "Leadership" (1996), and "Leadership for the 21st Century: Empowerment Environment and the Golden Rule" (1996), and "Leadership Doctrine: Changing Challenge into Opportunity" (1999).

General Reimer's leadership doctrine focuses on *Army Vision 2010* Warrior and Values. The warriors of *Army Leadership* are capable to act as a team or on their own, combat in an engineered or a natural surrounding, use an iron fist or a velvet glove. They are a testimony to their leaders' proficiency and effort. Their leaders may only be as good as their subordinates. In many respects, the doctrine validates Reimer's creed "Soldiers are our Credentials."

Values, the second major element of *Army Leadership,* bond leaders and soldiers together. James M. Kouzes and Barry Z. Posner (1987, pp. 190-191) define values as "the deep-seated, pervasive standards that influence almost every aspect of our lives: our normal judgments, our responses to others, our commitments to personal and organizational goals." They are an anchor point in a sea of change.

Reimer (1996) has based leadership on the seven values of loyalty, duty, respect, selfless service, honor, integrity, and personal courage. Values, of which the first letters (LDRSHIP) spell the acronym for leadership, are the foundation of the Army and are shared by its leaders.

A military leadership doctrine, unlike a corporate or a political one, applies simultaneously to two different worlds: the world of peace and the world of combat. In the world of combat, it is values rather than rules that remain a principal resource of a leader. Luttwak (1985, p. 200) writes, "in the heat of combat, only moral values count."

During the interview, General Reimer noted that young people need to be taught Army values because they bring a wide range of values into the military. To ensure that every soldier understands the importance of values, the Army produced a video on the subject. Additionally, every soldier was provided personalized value cards. New soldiers received them upon completion of basic combat training during an appropriate ceremony as "rights of passage" and as a constant reminder of the importance the Army places upon values.

Values presented in the form of dog tags and credit cards have had a great impact on the mentality of young soldiers. Some of them heard about values for the first time during Basic Training. While talking to their friends on home visits, they noted that their Army value system created a communication gap between them and their old friends. According to the February 1999 Harris Poll, society at large found the Army exemplary in developing values in young people.

In his article "Leadership Doctrine, " General Reimer points out that the Army needs adaptable leaders for the 21st century who can bring out the best in soldiers. The General calls on leaders to create a positive environment, to take care of people, and to tend to building character. Leaders create a positive environment by knowing their subordinates' names, knowing their strengths and weaknesses, and viewing their mistakes as learning opportunities.

General Reimer adopted the concept of taking care of people from General Creighton Abram's philosophy of "Take care of your soldiers. Do what is right every day. Get ready to go to war." The General explained that this guidance amounts to empowering soldiers to do what is legally and morally right, by letting them be all they can be, and by treating them as they (the leaders) would like to be treated.

During the interview, General Reimer stated that he has a deep belief in soldiers and their capabilities. He pointed out, "No soldier wakes up in the morning and says, 'Okay, how am I going to screw up today?'" (1996, p. 6). To put soldiers' capabilities into motion, leaders need to empower them to "be all they can be" and thus let them develop their potential.

General Reimer (1996) stated that leaders who deny soldiers self-actualization of the opportunity to "be all you can be" diminish immeasurably the Army's role as an institution. Moreover, he stated that many soldiers enlisted under this catchy slogan and "we have a responsibility to assist them in developing mentally, physically, spiritually, and socially to their full potential" (p. 6).

General Reimer believes that leaders who apply the golden rule, treat others as "you would have them treat you," are respected by their subordinates. He frequently visited soldiers stationed in the U.S. and overseas. To Bosnia alone he made five trips to visit soldiers. During the interview he said that he would talk to soldiers before deployment to "look them in the eye and see what their concerns were." Reimer was not only concerned about the quality of soldiers' lives but also about the welfare of their families. For all these reasons, he has been called the "people's general" (Miles, 1995).

Building character, the third element of General Reimer's guidance, focuses on compassion, courage, candor, competence, and commitment. He illustrates each feature with anecdotes from his experience. Reimer found a definition of courage in the words of a widow who said that her husband, Sergeant First Class Randall D. Shughart, "lived the creed." He describes leaders who exemplified courage by overcoming the reluctance to delegate authority to subordinates and of telling their supervisors they are wrong. General Reimer explains that sometimes accepting a nebulous decision in a peaceful setting may, later on, have a disastrous effect in combat.

Technology

General Reimer kept the Army ready for action, and, simultaneously was preparing it for the future. During the interview, he noted that, "The hardest thing is to manage change while conducting day-to-day operations. The Army cannot stop what it is doing to prepare for the future. We don't have that luxury because we must be ready."

Modernization of the Army with limited resources was another challenge that General Reimer has accomplished. Guided by *Joint Vision 2010* (*JV 2010*). Reimer (1999) launched two major digitization-oriented projects, *Army Vision 2010* (*AV 2010*) and *Army After Next* (*AAN*).

Army Vision 2010, a continuation of the *Force XXI* project, describes operational capabilities of the Army soldiers during the first decade of the 21st century. Soldiers of *AV 2010* are warriors able to act on their own. They are trained to survive in a variety of settings, capable to assess the situation at hand, and take appropriate action.

In 1996, the General launched the *Army After Next* (*AAN*) simulation, which projected a scenario 30 years into the future, to the year 2025. Knowledge, speed, and power would be the key ingredients of *AAN* operations. In this context, knowledge would equate an ability to respond to three relevant questions*: Where am I? Where are my buddies? Where is the enemy?* Speed means not only vastly improved strategic mobility but also increased tactical agility, which comes from situational awareness. The power of the *AAN* would be generated by the ability to tailor a mixture of forces ranging from special operations, light, mechanized, and strike and battle forces to come together as teams and accomplish the specific mission.

Army Vision 2010 and *Army After Next* were tested in digitized combat experiments and simulations. Conducted within the framework of a dangerous

unpredictable world, they generated situational data pertaining to the role and requirements of the Army in the future.

General Reimer described the Army role in the post Cold-War National Military Strategy in his article *Shape, Respond, Prepare (*1997). He pointed out that no matter how advanced technology becomes, it will only be as good as the troops who use it. He said that the effectiveness of the digitized system is dependent on timely and proper interaction of the troops with each other and their computers. With proper understanding and training, the digitized system can enhance the capabilities of our soldiers. Otherwise, it could turn into a military straight jacket. Knowing full well the need for face-to-face contact in order to develop trust and confidence between leaders and their subordinates, Reimer (1998) warned against abuse of technology.

The General has supported development of fuel-cell technology and hybrid electric vehicles, data buses, and night-vision devices and enhanced command and control systems. By comparison to commercial vehicles, fuel consumption in the electric vehicles has been reduced by half. Thus, these vehicles would reduce logistical burdens on the battlefield. Consequently, their increased mobility and speed would increase chances for survival and victory.

Efficient distribution of resources, rather than stockpiling of supplies, providing the right support at the right time, in the right place, became the hallmark of the US Army logistics under the guidance of the General. Centralization of offices and streamlined computerization of data further augmented efficiency.

Education and Training

General Reimer, who taught in the early 1970s at the Field Artillery School, has distinguished between education and training. In his article "Training: Our Army's Top Priority" (1996), he points out that training is specific and skill-oriented. It focuses on *what, how, when,* and *where.* Education, on the other hand, enhances training and goes into *why* and *whether*. Education, a lifelong process, never stops. During the interview Reimer said he was influenced by General William E. Depuy in his views on training and education.

General Depuy reformed training in the U.S. Army of his day. He found training to be too centralized, prescriptive, and inflexible. He was particularly dissatisfied with the use of the expression "on the trail" in reference to training. The expression originated from moving cattle from Texas to Colorado. The General gave total responsibility to each major general running a school. Depuy told them, "If there's anything that goes on that's wrong or dumb, stop it, and change it. Do what's smart, and tell me later." (Browlee & Mullen, 1987, p. 187) As a result of Depuy's training reform, novel approaches started surfacing. General Paul F. Gorman and his team came up with a concept of performance-based training. This type of training focuses on setting objectives through the careful determination of tasks, conditions, and standards. Performance-based

training has proven to be so successful that it is used to this day in the Army and many other institutions.

Performance-based training has become an educational model for General Reimer. In his article "Training: Our Army's Top Priority" (1996, p. 56) he called for "realistic, sustained, multiechelon and totally integrated combined arms training." He encouraged leaders to stay involved in training by setting up and implementing training curriculum. He saw the best trainers in leaders who do not shy away from conducting tough realistic training.

Moreover, General Reimer points out that leaders' participation in training briefings gives them an opportunity to mentor by sharing their experience with others. Each activity should be assessed on its investment return, especially in terms of a soldier's time. By elimination of redundant activities, soldiers gain time to internalize new skills and information.

General Reimer noted that the after-action review (*AAR*) is an essential element of training because it provides accurate feedback on goal attainment, the instructional process, and the results. He added that this *AAR* distinguishes the U.S. Army from the world's other armies. Such a review also gives leaders an opportunity to assess training transfer that is especially crucial in combat training centers, the crown jewel—in his words—of training.

According to General Reimer, an important part of mentoring is listening. We all should listen more and talk less (God gave us two ears and one mouth for a reason, he explains). He said that in many instances, listening to soldiers benefits leaders: Soldiers often know the solution to a problem because they are closer to it. He illustrated his belief with an anecdote about a truck driver who shortened refueling time by suggesting that "instead of having the fuel truck go through the motor pool to top off each vehicle, the vehicles should drive through a refueling station before going to the motor pool."

Reimer has promoted the integration of technology into training. During the interview, he said that distance training is a great tool for providing instruction to the U.S. Army troops worldwide. He has encouraged soldiers to use the Internet. They can use the "General Reimer Digital Library," which contains a variety of instructional and informational materials on military matters. Over 5,000 readers have used the library daily.

Language

The new National Security Strategy has placed new language requirements on the military. In the article "Army Language Needs for the New Century," General Reimer (1997, p. 147) wrote that the Army has been expanding requirements for military, police, medical, and legal translators and interpreters. In response to these growing requirements, the Army established the Foreign Language Proponency Office. The office, in turn, established the Army Linguist Program and Contract Linguist Program.

The Army Linguist Program raised the proficiency goals to the Level Three of the Interagency Language Roundtable Scale, an equivalent of the Advanced Level of the American Council on the Teaching of Foreign Languages

Scale. Further, this program involved unit commanders in language maintenance. Moreover, it provided such incentives as Linguist of the Year Award and Foreign Language Proficiency Pay. The Contract Linguist Program, on the other hand, provided reliable foreign language experts on demand. To improve efficiency of the programs, various operational systems were converged into one and centralized language databases were set up.

To maximize the declining resources, the Army zeroed in on 31 million bilingual Americans, also called heritage linguists, who could be of service to the armed forces. Because the concept was successful, other services soon followed this trend. The Army also alerted military leaders that heritage civilians could assist the military in performance of certain tasks such as translations.

During his visit to the Defense Language Institute Foreign Language Center, General Reimer learned more about language training. He was impressed with the quality and quantity of intensive programs at the Institute. Subsequently, he and the Commandant of the Institute, Colonel Daniel D. Devlin, discussed retention issues. The Commandant expressed a concern that sometimes fully trained linguists move on to other jobs or separate from the service and new linguists have to be trained from scratch. To enhance the careers of military linguists and thus increase retention data, the Worldwide Language Olympics and Command Language Program Managers' (CLPM) Seminars are held annually at the Institute. General Reimer expressed full support for these programs and implemented additional measures addressing retention. As a result, soldiers currently receive extra pay for language proficiency. In the long run, the General concluded, the Army saves money by investing in proficient linguists.

Additionally, General Reimer (1998) pointed out that innovative training methodologies should be explored to meet high demands for linguists. In particular, he foresaw the need for training materials that would advance proficiency and facilitate a conversion of capabilities from one language to another.

Service members frequently find themselves in situations in which a foreign language proficiency and cultural savvy are necessary prerequisites to successful performance. Journals such as *Applied Language Learning* promote understanding of such skills.

General Reimer believes that society at large needs to be better aware of the issues involving the Army. In his article *The Army and the Congress* (1998), he encouraged Army officers to provide information to Congress about the Army, "Showing them our equipment, training, facilities, homes, and soldiers allows them to know how well they are fulfilling their constitutional responsibilities."

The purpose of this interview is to close the gap between the military and academia. General Reimer invites academia and industry to conduct joint research. It is an invitation that, in our times of unlimited possibilities and limited resources, we cannot afford to dismiss.

* * * *

At your retirement ceremony on 17 June 1999 at Fort Myer, William Cohen, the Secretary of Defense, stated that your enthusiasm for troops is unsurpassed. His view was seconded by General Henry Hugh Shelton, the Chairman of the Chiefs of Staff, who stated that your quiet leadership was epitomized by the phrase that has become your creed: "Soldiers are our credentials." You said: "While the complexities of this institution are great, at the core it is very simple: It is all about people." Why are you reminding us that people are the starting point?

We become infatuated with technology, we focus on how it allows us to do things differently and how it improves efficiency, but ultimately whatever we do in the United States Army, it all comes down to people. It is the people who make things happen. When I say "people" I also include Department of the Army civilians that make up the Army team.

It is good to reflect on fundamental issues during the busy time we live in. For me those issues have always been people, primarily soldiers. It is helpful for all of us to remember that it starts and ends with people.

In "The Army in a Year of Transition" Remarks (1999) to the Reserve Officer Association you told a heartwarming story about a Private King in Bosnia:

> *Private King found himself surrounded by an angry mob. They were going to take his weapon away from him and hold him hostage. This young man, 18 or 19 years old, held his ground. He did not give up his weapon and after an hour they let him go. When he returned to the 1st Cavalry Division and was recognized, he was asked, 'How did it feel? Weren't you a little bit scared?' King replied, 'You know, I was a little bit worried about it; but I knew if something happened to me, you all would come and help me out.' (p. 5)*

What is the significance of this story to you?

This Private King story struck me because it reflects the faith of each member of the Army in our fellow soldiers, our belief that the Army will not fail us, and that in times of crisis the whole Army is out there together. Private King epitomizes that belief. He had trust and confidence in his chain of command and his fellow soldiers. What a great thing! Sure, he was scared. He had never been in that situation. Anyone would have been a little bit anxious in the same situation, but he had faith in his fellow soldiers and in his chain of command. He knew that the superiors who had put him in that situation would not forget him. This story demonstrates the faith that each member of the Army should have in the chain of command, both up and down.

Your leadership positions have ranged from basic training to the largest command in the Army, Forces Command. Which one gave you the most satisfaction?

Each of my commands was a source of great experience and tremendous satisfaction, but I most enjoyed the battalion and the company commands. At the battalion-level command, I knew everybody and I knew a lot about each one of them. I had a lot of good people working for me, and I had the opportunity to work for them. It was a very enjoyable command because we were like a big family.

At the company level, the basic training company command at Fort Benning was my best preparation experience for the position of Chief of Staff. I learned how drill sergeants turned civilians into soldiers during basic training. Throughout my career, I have never forgotten my time at Fort Benning and what it takes to make soldiers.

You produced a videotape and wrote several articles on values for Military Review. *Why is it important for the Army to focus on values?*

Such values as loyalty, duty, respect, selfless service, honor, integrity, and personal courage are the foundation upon which the U.S. Army, value-based organization, is built. These values spell out the acronym for leadership, L-D-R-S-H-I-P. Leaders have to live the values and to share them. They must exemplify them daily.

I made the video and wrote the articles on values (1996, 1998, and 1999) to make sure everybody who joins our organization understands them. Additionally, we have issued values cards, dog tags and other reminders of the Army Values. Those are not gimmicks, though no card or no dog tag can instill values.

In my mind, people do great things because of their belief in these values. People do not heroic deeds because they have been taught or trained to be heroes, but because they are willing to sacrifice a lot, in some cases their lives, to fulfill their beliefs.

Today many adolescents are exposed to hours of violence on television and theater screens and minutes or maybe seconds of talk about values with their parents. Do you think that new recruits today need more information and guidance on values than their older colleagues?

The Aberdeen situation reminded us that people do not enter the United States Army from a homogeneous value base. They come into the Army with different values. Consequently, at our first opportunity, we need to ensure that they understand those values that we hold dear. We now devote more time to values in basic training and throughout a person's career in the Army.

You cannot just read about values, you have to live them, demonstrate them, and prove their significance. That is the way you get values instilled in an organization and that is the challenge of all United States Army leaders.

How did you learn values?

I learned values from my parents. They exemplified values daily and passed respect for them on to us. Values meant a great deal to them. My parents were God-fearing people who had deep religious faith. They believed in the American way of life. They learned values from my grandparents who had immigrated to the United States at the turn of the century.

West Point taught me that duty, honor, country were much more than three little words, they were a code we lived by. I found the value training there consistent with my parents' guidance. I was comfortable with this emphasis on value and very much at home with those who shared those same values. To me, emphasis on values has always been one of greatest strengths of the Army.

What did you plan to achieve as a young person?

As a young person, I am not sure I had specific goals, at least as they pertain to the military. I went into the Army because I applied to West Point and was accepted. I knew I owed the Army five years of service for that education. I served five years, but afterwards every time I would have an opportunity to leave, the Army would send me to an exciting assignment or something else good would happen to me. Once I entered the service as a second lieutenant, I enjoyed it; it never entered my mind to leave the Army. Thus, I stayed with the Army, and 37 years later, I found it hard to say "goodbye."

Looking back over your career in the Army, what are you most proud of?

Regardless of my Army rank, I did not postpone any issues or pass them off to somebody else. I dealt with the issues that were on the table. I tackled them head on and did the best I could upon the information I had. Today, at the end of 37 years, I feel good about the fact that I did not dodge any of the tough issues.

Do you have any advice for young soldiers whether they be enlisted or officers?

Yes, I do. I would say: Stick to the three fundamental rules that I talked about to commanders at all levels. *First*: Do what is right every day, legally and morally, and remember that it is not enough just to do what is legally right. You must look inside yourself and ask, "Is this the right thing to do?" You must give it the moral litmus test. *Second*: Create an environment where people can "be all they can be." We need to create such environments and we need to challenge ourselves to "be all we can be." *Third*: Apply the golden rule: Treat others,

regardless of race or gender, as you would have them treat you if the situation were reversed.

What opportunities did you create for officers and enlisted personnel to enhance their leadership and survival skills?

Leaving details to my subordinates, I gave mission-oriented orders. I coached and mentored when I thought they were headed for problems. I tried hard not to give too much guidance. I wanted to create the framework, or, in my terms, prescribe the sandbox in which they could operate with maximum flexibility.

I tried to create an environment where people could do what had to be done themselves. I tried, as much as possible, to create the conditions for success. Such a way of doing things brings out the best in people's performance because the strength of the American Army lies in the people and their ability to innovate.

I had the opportunity to travel and see other armies. None can match our ability to look at issues, pinpoint the problems, and create solutions. We have initiative. If we had to wait for somebody up high to tell us, "Do this," our performance would be slow and inefficient. That is not what the U.S. Army should do.

Personal initiative is easier and better. A lot of the good ideas bubble up from the bottom. Many times I found a solution to a problem by asking the closest person to it, a specialist or a private, "How would you solve this problem?" At other times, I would ask civilians who have worked in the logistical field for many years, "Why are we doing it that way and how would you do it better?" You want to capture the ideas of these people and implement them.

How much guidance should a leader provide in a military environment?

Not too much and not too little. You neither want to give people too little guidance, nor to prescribe a sandbox that is too tight to perform. People need flexibility. You want people to try innovative ideas and to think out of the box to the maximum extent possible. Nevertheless, you will encounter a fine line between initiative and standards. Working your way along that fine line, you will figure out the right balance between initiative and standards. While maintaining standards, you are trying not to stifle initiative, but rather to develop it as well as new ideas and better business ways.

Currently, society is undergoing a cultural shift. Assimilation that was the ideal of the industrial age is replaced by the new ideal of diversity. How is the Army preparing for the new age of diversity?

We, the Army people, are a diverse organization of men and women of various races and backgrounds. We take advantage of our diversity because it gives us a broad range of skills and talent to leverage. Our diversity is our asset.

I talked frequently to Army leaders about promoting diversity by fostering an environment in which soldiers could "be all they can be." Soldiers of all backgrounds contribute to our service. We can do our best by treating people with dignity and respect and by letting them "be all they can be."

Mentoring or "letting people grow" is a part of educational process in a workplace. Brigadier General Randal Rigby, former Deputy Commandant of the Command and General Staff College at Fort Leavenworth, said of you, "He allows people to grow because he lets them do their jobs without interfering with their business" (Miles,1995, p. 1). How do you "let people grow"?

By giving them a lot of flexibility. I say, "Okay, this is the mission, and here is how much time we have to accomplish it." Following the necessary guidance, I turn them loose. If you pick good smart individuals, give them flexibility, and reward them for the job they do, they will do a good job. In sum, I believe that if you turn the American soldiers loose on a problem, they will figure out how to solve it and complete the job.

Do you remember being disappointed?

There is nothing that sticks out in my mind. My approach to this issue has been rewarded in many ways.

I am sure that there have been a few times I have been disappointed in some of my subordinates' work. Those do not compare, however, to the majority of cases in which I was pleased by their accomplishments. If this philosophy had not worked thus far, I would have dropped it.

Could you tell our readers about the people whom you consider to be your role models?

The names of Generals Douglas MacArthur, George C. Marshall, Creighton Abrams, John J. Pershing (Black Jack) come to my mind first. Although I did not think about them as role models at the time, but as I reflect I realize they influenced me greatly.

I was fortunate enough to be at West Point in May 1962 when General Douglas MacArthur gave his "Duty, Honor, Country" speech. He said to us, "Yours is a profession of arms, a will to win, the sure knowledge that at war there is no substitute for victory. That if you lose, the nation will be destroyed." I have reflected on that statement many times and thought, "Boy, that describes what a special profession we have and how important it is that we do this right. I cannot think of anything that is more important to us than the nation."

General George C. Marshall, another one of my heroes, always lived up to all Army challenges. Whenever the Army or the nation faced a tough situation, the general was there. He had unshakable faith in the Army. People who worked for him admired his ability to handle the most demanding Army

tasks in a calm and professional manner. The President asked him to be the Secretary of Defense and the Secretary of State because he had so much confidence in him. In total, George Marshall epitomized selfless service.

General Creighton Abrams and his associates had a great influence on me. As Chief of Staff, I often found myself wondering what General Abrams would do with a particular issue. He became a mark on the wall for me, a litmus test for my decisions.

Abrams was a soldier. He thought like a soldier and he had the heart of a soldier. I watched him coming out of Vietnam, rebuilding that Army, and getting it back on the right path.

Unfortunately, the General died too early to see the fruits of his labor. We should not forget, though, that he turned the Army around and got us refocused on our wartime mission and the fundamentals of preparedness. In my opinion, General Abrams was the father of today's Army.

General John J. Pershing is another example of a hero. Unfortunately, he does not get as much credit as he truly deserves. I consider him a role model because Black Jack Pershing established the principle that American soldiers would not be replaced individually in World War I and would always be commanded by American commanders. This principle puts a great responsibility on commanders at all levels. They must make sure that their soldiers are trained and ready.

Luttwak (1985) writes about General MacArthur on the Korean front,

> *There was no need for Douglas MacArthur, then 70 years old, and very much the Commander in Chief, to land at Inchon on September 17, 1950, when North Korean tanks were still counter-attacking nearby. There was no need for him to drive beyond the burning town to the ridge where a Marine regiment was in close combat, climbing on foot to reach the target under fire. His transparent excuse was that he wanted to decorate an officer who happened to be there. There was no need for him to go even near to the enemy to see the burning wreckage of a tank ambush exposed on the slope to enemy snipers, where as it happened North Korean troops were still in hiding.* (p. 35)

Do you feel that a leader needs to share in the risks to be internally accepted by the troops?

Yes, you need to participate in training activities and combat operations. Soldiers take a great deal of pride in your participation. You inspire soldiers by sharing in those risks.

That is a fundamental part of leadership. From that shared experience leaders earn the trust and confidence of their subordinates and are able to influence their actions at the critical time. MacArthur demonstrated risk sharing

at Inchon by participating in the landing. Inchon was a highly successful, but risky operation. Had he failed, people would have commented, "Why did he do it?"

In a similar vein, Lieutenant General Matthew Ridgway demonstrated risk sharing at the Korean front. The results of his courageous performance were great. I am sure there must have been some who questioned his initiative. By the end of the day, however, his risk taking, just like MacArthur's, paid off and the benefits were great.

You boosted soldiers' morale by visiting them in war and prior to deployment. Specialist Harry E. Fox of Fort Bliss, Texas, 2nd *Battalion,* 43rd *ADA Regiment, appreciated your visit prior to deployment. He said, "Having General Reimer visit helps boost morale. It lets us know the people at the top are looking out for us. They are concerned with what we are doing."(Pike, 1998, p. 1). What did you learn from such visits?*

You learn a couple of things by visiting troops before deployment. First, you get a feel for how ready soldiers are personally. You can monitor figures and statistics to get the readiness indicators, but there is nothing like looking people in the eye who are about to deploy, seeing their level of confidence, and feeling their anxiety. Whether you are deploying for the first time or the 100th time, there is always anxiety. Soldiers are tense because of the nature of military operations. In sum, one can tell a lot about the organization by looking soldiers in the eye and talking to them at the departure point.

Second, if you need to assist them in some way, by being there, you can make things happen a lot faster. You call the Department of the Army from the site and say, "Look, we need to make sure we get these people this type of equipment." You get results. If you would send somebody else, assistance would not necessarily be as forthcoming.

You are cutting red tape.

You cut through all the bureaucracy and you make things happen fast. Also, you have an opportunity to check on the welfare of soldiers' families. With two-thirds of the Army married, a good family program is very much a combat multiplier. There is no substitute for personal visits to deploying troops.

I visited troops as often as I could, not only when they were deploying, but also in peacetime. These visits gave me the pulse of the United States Army.

You define honor in terms of people, "I have been fortunate to have had the opportunity to serve alongside them, to fight for them, and to lead them—there is no higher honor." Could you elaborate on this statement?

When you think about the fact that America trusts you as a commander with the lives and welfare of her most precious assets, her sons and daughters—

how could the country honor anybody more than that? That is the highest honor we can pay anyone in my mind. It is also an awesome responsibility. That is why commanders are so important.

What goals did you set as the 33rd *Chief of Staff for yourself and the Army?*

The goal was to remain trained and ready while we were conducting the most fundamental restructuring since the end of World War II. Thus if the President of the United States, the Commander-in-Chief said, "I need the Army to..." we would be ready to respond immediately.

To meet this major goal, we worked on several paths simultaneously. First, we completed the downsizing. Second, we advanced significantly the digitization process that was fully designed to leverage the information technology. Third, I personally spent a lot of time with the leadership to make sure they understood the important aspects of the vision. Fourth, we designed and implemented a new way of evaluating officers. Fifth, we designed and implemented a better personnel management system that reflects today's world.

We met all these goals thanks to the hard work and sacrifice of many dedicated people.

On November 13, 1996, you released Army Vision 2010 *(*AV 2010*). Could you tell our readers how the Army contributes to the fulfillment of* Joint Vision 2010*?*

Joint Vision 2010 (*JV 2010*), written by the Joint Staff, encompassed all service visions. The vision was built on four tenants: dominant maneuver, precision strike, focused logistics, and all-around force protection. The Army component of that vision, *AV 2010*, was very much in synch with the joint vision, but dealt primarily with the role of ground power in fighting and winning the nation's wars.

Applying those four tenants as guideposts, the *AV 2010* focused on a cost-effective transition of the Cold-War systems from the industrial age into the information age. The vision focused on means of providing situational awareness on the battlefield. Ultimately such awareness would lead to information dominance.

What makes changing the Army a challenge?

The fact that the Army is so frequently deployed makes change a sporty challenge. Since the end of the Cold War, we have deployed the military at least 32 times. We have provided the predominance of the forces in majority of the operations because they took place on land where the Army has a staying power.

Our soldiers and leaders are extremely busy, and never have as much time as they would like to relax and "smell the roses." If we would focus on predictability of future operations, we would gain clues for tentative advanced

planning. Such planning, in turn, would allow us to draft long-range action and leisure schedules. In sum, predictability would enhance quality of our soldiers' lives by disclosing to them when they could expect action time and when they could expect leisure, or "smelling the roses," time.

To you good leadership boils down to managing change. You said, "Managing status quo, there is nothing to it." Could you describe to our readers how you managed change while leading the Army?

Well, I stole the saying from an airline magazine. On my way home, I picked up this magazine to read during the flight. In the magazine, the airline CEO was pointing out that the challenge for leadership is change. "Boy," I thought, "does he have that right!" The key to managing change is leadership. Leadership takes challenges and turns them into opportunities.

Although the primary mission of the Army has always been to fight and win the nation's wars, the challenges of the post Cold-War world took us miles beyond it. To meet these challenges with shrinking resources, we changed these challenges into opportunities. In the process, we have triggered many changes. They centered on a considerable expansion of our mission and duties, design of a new evaluation system, a comeback to shared values, and our force's transition toward the *Army Vision 2025*.

The current National Strategy has expanded the military mission into international peacekeeping operations. We realized that we needed not only officers who could conduct the Cold-War conventional type of operations but also foreign area specialists who understood other countries and could communicate with their leaders. As we got more involved in coalition operations, we became more dependent on the cultural and linguistic capabilities of these specialists.

Our tasks were multiplying in inverse proportion to our size. We realized that, in the smaller Army, each person contributes to the mission in precisely defined terms. We came up with four career fields. We described them in our new *Officer Personnel Management Study*. In my mind, the officers in these new career fields have changed the way we have done business in the past.

To assess current performance of our people adequately, we designed and implemented a new Officer Evaluation Report (OER). The old one, used during post Cold-War downsizing, focused on zero-mistakes mentality. By refocusing on self-development and education, the new report has changed the evaluation process and also the performance of the evaluated officers.

As soon as we realized that we had shifted our eyes off the value ball, we focused on values and redoubled our efforts to instill them in our new soldiers. We added one week on teaching values into our Initial Entry Training (IET) curriculum. Because values involve much more than one week of training, we tied them in directly to leadership doctrine and thus ingrained them in a career path of every leader.

We moved the ball forward in technology by developing the *Army After Next* that dealt with the role of the *AV 2025*. From the perspective of the year 2025 towards the present, we came up with an azimuth of change and refined it in accordance with our experimentation process.

During the last five years the Army has taken specific steps to increase cooperation and interconnectivity with the other services. Some of these issues you raise in your article "Joint Warfare and the Army-Air Force Team"(1996). Could you describe how joint operations benefit the nation?

Although the Army has played a key role in a majority of the operations, they have been primarily joint operations. The use of joint military force is most effective because the ground, air, sea, and naval forces complement each other well.

There are still a lot of turf battles associated with the way the services approach issues of mutual interest. The Air Force approaches these issues one way, the Army approaches them another way, and the Navy or the Marines approaches them still another way. At the Pentagon, we can spend two or three years arguing about the *real* meaning of lines on a map.

Let us interpret these lines as well as we always have done in the theatres of operations such as Korea or Southwest Asia in which lives were at stake. We can get past these turf battles and develop trust among the services. We can create the best joint team in the world. That means that all services, Army, Navy, Marines and Air Force, will trust each other individually and collectively.

Sometimes you need to conduct discussions on lower levels between the services, i.e., Air Force and the Navy, instead of going all the way up to the Chief of Staff, from one top of a mountain to another top of a mountain.

You have raised a valid point. If we reached an agreement on these issues at a lower level, we would not suddenly find ourselves at the top arguing over the basics of various topics, with each side having empirically developed its own, possibly contrasting statements. In other words, if we could deal with these issues at the operational level, then the entire process would be less confrontational.

You created the Total Army concept by combining Army National Guard and Army Reserve units with the Active Component. Why do we need the Total Army?

We need the Total Army because the size of the active Army has been reduced whereas its duties have multiplied and expanded. Today the Army is about 35% smaller than it was 10 years ago. We have reduced the size of the Army by over 600,000 people, including civilians. We have put the Active Component,

the Reserves, and the National Guard together as the Total Army. They are not duplications of the active component.

We are using the Total Army more than ever because we are busier than we have ever been. Nearly 52% of the Army, the highest percentage since World War II, is in the Army Reserves and the National Guard. For that reason so many reservists have served in Bosnia and many more will serve in Kosovo. We do not have that luxury of fighting a war like Vietnam which we conducted without reserve components.

Today reserve components are involved in all operations. For example, the reserve-component linguists help meet our foreign language requirements. The small number of active-duty linguists cannot cover all regional needs in a crisis situation, especially in unexpected places like Somalia, the Balkans, Bosnia, and Kosovo. This holds true across the board in the Army.

You wrote in your article "The Army's Needs for the New Century" that today's Army needs medical interpreters, legal translators, as well as psychologists, military coordinators, and police who are proficient in foreign languages (1997, p.147). How has the Army been able to meet all these new needs?

The Army is meeting all these needs by becoming more dependent upon the Total Army team. This team facilitates our work with civilians and the reserve components. Everybody in this team has a vital role. The Total Army is about maximizing and leveraging the capabilities of people.

Total Army units operate in a different sequence now. Some units that we used in the final stages of the Cold-War operations, we use in the early stages now. For example, during the Cold War we expected civil affairs units to be used at the end of hostilities, and now we use them early-on to rebuild countries.

How is the national strategy determined?

Basically the national strategy is determined by the administration and hopefully reflects the will of the American people. Our strategy during the Cold War was containment. It was a good strategy then, but now, in a different situation, the nation opted for engagement and enlargement strategy. As the situation changes, we need to continue the debate to determine the best strategy for the United States of America.

We have to have a well-defined strategy to project the resource requirements of the United States Army adequately.

Has the national military strategy changed in recent years?

The national military strategy has changed so fundamentally in recent years that the magnitude of change was hard to comprehend even for some Army people. The strategy has shifted from our ability to defeat the Soviet Union to an engagement and enlargement strategy. The goals of our new national military

strategy are to be able to respond to threats wherever they may occur, shape the environment, and prepare for an uncertain future. That strategy sets the requirements for the United States Army.

Thus, we are prepared to deal with a variety of threats, whether they be in the Middle East, Asia, South East Asia, or elsewhere. Simultaneously, we are shaping the environment: That is, in my words, making the world safer for our children and grandchildren. For us, the soldiers, it means finding ourselves in situations in Haiti, Somalia, Bosnia, or Kosovo that we might not have faced in the Cold-War world.

At the same time we are preparing for the uncertain future. We are building the *Army of 2020* so that we have the right Army for the nation at that time. It takes time to modernize the Army so we have to start now.

What impact does the national strategy have on the military?

The strategy conveys the policy of the administration to the military. As a nation, we have to figure out what we want the military to do in the post Cold-War world. The strategy would help us to estimate future needs and, consequently, to manage the Total Army deployments more efficiently. Although we must always be prepared for the unexpected in this business, a clear definition of the post Cold-War strategy would make it a lot easier for our people.

The Army War College held a conference on "Challenging the United States Symmetrically and Asymmetrically; Can America be Defeated?" in 1998. During the conference, Lloyd Matthews (1998) described hidden advantages of asymmetry in this manner:

> *A powerful modern force from an advanced western industrial nation undertakes to subdue a small tribal state of spear-throwing goatherds who live at an elevation of about 15,000 feet. Their tribe lives in mountain caves and clefts. In brute military terms, the moderns at first glance appear to have every conceivable advantage. However, analysts note that the goatherds do have a few modest factors in their favor. They are physically acclimated to working in the cold, oxygen-depleted environments. Their food supply is simple at hand and well-nigh inexhaustible. Their hideouts and caches are impossible to locate from the air and the road, and the torturously steep terrain is inhospitable to any means of transit but the foot. (p. 19)*

Why does the Army focus on asymmetrical threats?

The Army focuses on asymmetrical threats because they may become a source of conflict. It is unlikely that any nation today is going to challenge the United States Army in a "tank-on-tank" battle. Adversaries prefer to focus on our

vulnerabilities because they do not have the conventional power to confront us directly.

The challenge we face is that we have to continue to be a full spectrum force for the United States of America. As the new threats emerge, we are there to counter them. Nothing, however, ever seems to come off the table. New threats emerge, but the old ones still remain, although maybe in a lesser form.

Moreover, our economy depends on the stability on all continents, be it Asia, Europe, Africa, or South America. As we are becoming increasingly interdependent upon other nations, we need to maintain stability to have a thriving economy.

At a January 1999 press conference you said that Army operations in 1998, which you called a year in transition, have increased disproportionately high (300%) to small budget increases. Why did you call the 1998, "a year in transition"?

It was the 13th straight year of declining resources for the Army. This decline goes back over three administrations. When the Berlin wall came down, we knew we would have to reduce the Army but, given today's requirements, we have cut too much.

The 1998 Readiness Hearings revealed that we cut too deep into the dollars. The Pentagon and Capitol Hill realized that we had a resource-requirements mismatch. Performing according to expectations, we could not sustain the force with the resources allocated. We needed more money to do the job that we were asked to do, including all these deployments and preparations for an uncertain future. We needed either to reduce the requirements or increase the resources. We succeeded in convincing the proper people that we needed to increase the resources, but I am still not sure that we have enough.

The money problem that people in the military talk about having in the field is real. We had done a good job in getting the most out of the dollars that we were given, but there were just not enough dollars to do all the things that we had to do. We have to do some correcting. We need the strategy to spell out the details of our mission and subsequently to prepare our requirement blueprint. Once that is decided then we need to get the right amount of money for the Army to do the job.

You occasionally talk about "peace dividends." What do you mean?

People often ask about peace dividends. The natural and best answer is that peace is a dividend in itself, but there is also a dollar value associated with it. That dollar value is about $780 billion. You get that figure by straight-lining the budget in 1989 and comparing it over the past ten years to the executed budget. The difference between those two lines was about $780 billion. By that measure, there was a tremendous peace dividend that was gained through the downsizing and the reduced cost of the United States military.

As the 33rd *Chief of Staff you were involved in peacetime operations in Haiti, Somalia, the Balkans, and other countries. Could you describe the impact of humanitarian and peace support operations on equipment, training, and retention?*

These operations have an impact in all those areas. In terms of equipment you pay a price. You either take the equipment with you or you leave it behind. If you leave it behind, you transfer that responsibility to somebody else. Odds are fairly good that the new person is not maintaining that equipment as well as you would have and if you would take it with you, you would use it extensively under adverse conditions.

A demanding transfer from the peacekeeping operation to the conventional mission poses the greatest difficulty. When you return home, you are thrust back into maintaining your equipment and developing your warfighting skills. Many of these skills atrophy during extended peacekeeping operations and you have to get trained and ready again for the conventional mission. There is really no time to catch your breath.

The Army could manage the entire deployment process more efficiently, if it could give people advance deployment and return dates. A certain percentage of people enjoy deployments. The problem is that some deploy as often as six or seven times in the course of ten years. Such frequent deployments have created a hardship for soldiers and their families. They have also lowered our retention rate.

During the beginning of U.S. involvement in Yugoslavia, an Army specialist, with four years of college education, commented to me, "When I joined the Army, I did not expect that one day I might be sent to defend a minority in a foreign country." What would you say to him?

I would tell him that he is making a wonderful contribution to humanity because he is helping save lives in that part of the world and giving people a chance for peace. I would also tell him that this is important to his country and that I know he will represent us well. I hope he will be as proud of his contributions as I am.

I would tell him that if we do this right, we would be helping to make the world safer for his children and grandchildren. I am not sure that he will ever have an opportunity to make a greater contribution than this during his lifetime.

I would also assure him that we will not put him in this situation until we are sure he is properly trained and equipped to handle this task.

You pointed out that following the Cold War, "We found ourselves in a new world order, long on new *and short on* order*." (January 1999, p. 2) Could you elaborate on this statement?*

We have found ourselves in a different world. We did not expect the crises that we have faced over the last 10 years. We probably should have realized that at the end of World War II we put a lid on certain national and ethnic issues.

World War II and 50 years of Cold War did nothing to solve these problems in areas like the Balkans. The Cold War really froze the region in time and the fall of the Berlin wall lifted that lid, the Soviet Union, of these built-up tensions.

Consequently, the world had to deal with these unresolved tensions. They had manifested themselves in different ways. Over the last few years, we have had to deal with these complex issues that are rooted in six to seven hundred years of history. They require an enormous amount of time rather than a surface quick fix, because they involve changing the mentality of generations.

Society performs according to traditionally established patterns. For example, in the Middle Eastern or Japanese cultures a suicide to further a cause is considered honorable. The Army experienced it first-hand during World War II in confrontation with the Japanese kamikaze. How important, in your opinion, is familiarity with foreign cultures for the Army?

It is important to understand the culture and way of life of our allies as well as our potential adversaries. Foreign area officers now are so important, not only because of the language skills that they bring to the table, but also because of their understanding of other people and their cultures. To understand people's motives, you have to understand their culture and beliefs.

Army personnel serving during WWII and the Korean conflict observed that the skills of the interpreter affected the course of negotiations and of interrogations. One of them stated,

> *Interpreters must be able to think on their feet and to think fast. They must be capable of meeting the demands of extemporaneous interchanges. They must be intelligent and perceptive. Remember that the interpreter is often the man with the real power in a conversation between people speaking different languages. (Fishel & Haussrath, 1957, p.15)*

What role do interpreters play in the military today?

Interpreters play a key role. To capture correctly live conversation, they must understand the culture ingrained in the language. If they are unable to capture the nuances of the conversation, they may miss a key point. Interpreting is much more demanding than just translating texts.

Following the Korean War, an enlisted linguist recommended that more officers should acquire language proficiency (Fishel & Haussrath, 1958, p. 17). Does the Army currently have enough officers proficient in foreign languages?

We could use more officers proficient in foreign languages. They bring a highly sought-after skill to the table.

You commanded units on the front lines of the Cold War. To what extent did you rely on assistance from the military linguists?

We focused our intelligence-gathering operation on the Soviet threat. Our linguists provided intelligence. In many ways what they gathered then was, and perhaps continues to be, some of our best intelligence. The linguists played a key role in terms of the unit readiness in the Cold War and they continue to play a key role now. Although our strategy has changed, the importance is just as great. The linguists, the primary keys to our world, enable us to communicate with these people.

Was linguist assistance adequate during Desert Shield and Desert Storm?

In 1990, a year after we came out of the Cold War, we found ourselves thrown into Desert Shield and building up for Desert Storm. At that time, we still primarily emphasized the Russian language. We placed less emphasis on the Middle East languages. We had to pull the Arabic speakers with the language skills that we needed from throughout the Total Army and get them over there to make sure we had the right capability mix. We also contracted civilian translators.

We monitored linguist readiness during Desert Storm. My overall analysis was that the linguist assitance over there was adequate. As an institution, however, we were stretched very tight.

Lieutenant Colonel Richard Francona, a personal interpreter of General Norman Schwartzkoff, in an interview for Applied Language Learning *stated that knowledge of history and religion of a target country is necessary in successful communication. He said that Saudi officers during discussions would make references to past events, customs, or symbols that entailed certain content unknown to the American officers.*

My experience was similar in Desert Storm. Lieutenant General John Yeosok, the Army Forces Commander in Saudi Arabia, always would remind me that we deal with a kingdom and not a nation. He was rightfully concerned that we could lose the operation or the war if our soldiers did not understand that Saudi Arabia is a kingdom. We must respect their way of doing things. Thus knowledge of an area's history and religious beliefs are very important to today's soldiers.

Lieutenant Colonel Alexander in "The Future Wars" predicts that social groupings will be based more along belief systems than geography and their fragmentation will increase. Is it a valid point?

He brings out a good point. The lines on a map defining the shape of a nation are not always drawn correctly. They do not necessarily define the true borders. There are invisible religion, language, or ethnic lines that in many cases are more powerful than sometimes artificially established border lines.

Is it beneficial to the Army to take steps to retain trained linguists?

Yes. We spend a lot of time and dollars to train linguists, but we are unwilling to do the things that would retain them in the Army. Consequently, we pour more money into training new people rather than spending the money on the ones that we have already trained. Difficult languages take a long time to get through and master. We have got to think about that a little differently.

This issue came out loud and clear to me when I visited the Institute at the Presidio of Monterey. With just a little bit of effort, we may be able to retain more of these trained linguists who like what they are doing instead of going out and recruiting new people and training them from scratch.

At the Institute, language students have been taking their academic and military duties more seriously than ever and consequently have been excelling in both areas.

I am pleased with that positive trend and I have seen it, too. Although I do not know the DLIFLC students as well as you do. I have certainly seen that positive reflection of our Army. People do take their jobs seriously. That is the mark of a true professional. They are professionals, and a professional excels in everything.

It is a positive trend. All of us in the Army are pleased with what is happening.

Colonel Devlin, the DLIFLC Commander, launched an experimental language program in the Spanish Department. In it, the experimental-group learners were linked to the Internet to access authentic materials and to talk to native Spanish speakers. Consequently, they outperformed the control-group learners who were not hooked up to the Internet. Should such experiments be promoted and, if successful, implemented?

We should push the envelope on such experiments and learn from them. We have the chance to engage and enrich many soldiers in a variety of subjects regardless of their location. The interactive nature of distance learning, in which students can ask questions and can dialog with each other, instructors, or leaders all over the world holds a great promise.

With further advancement, any soldier could plug into a civilian institution and be exposed to the best educational programs available whether he or she would be in Bosnia, Fort Hood, or Seoul. The entire Army and each soldier need to embrace distance learning and experiment with it, work with it, and get comfortable with it.

You pointed out in your article on "Army Language Needs"(1997) that DLIFLC has been a pioneer in conducting two-way foreign language maintenance and sustainment training worldwide. In what other areas did you find distance learning useful?

Most subjects, including operations and doctrine, would lend themselves to distance learning. A few others would require a practical application phase. For example, if we would not train mechanics on real vehicles, they might not be able to fix them in the field. In certain situations, students should be in a hands-on environment with an instructor. Thus the instructor could watch them to make sure they have mastered the skill before giving them a "go" on it.

Today intellectuals and politicians have renewed interest in education. Alvin Toffler explains in Power Shift *that it stems from growing global competitiveness. In a similar vein, Sheila N. Kirby and Harry J. Thiel in* "Managing the Enlisted Force: Whistling in the Wind" *point out that in the 21st-century world, "New missions, organization, and technology advances, and changes in societal views about military service continue to demand a highly trained and educated, highly specialized, highly motivated enlisted force" (1998, p. 583). What steps has the military taken to prepare such a highly educated cadre?*

For some time we have realized that we need a highly motivated specialized force. After we opted for the volunteer force, we started to look at all the indicators. We measured the quality indicators by test scores. A high school diploma has been one quality indicator. We wanted at least 90% of the recruits to be high school graduates because their ability to graduate meant to us that they would be able to stick with a program and complete it. Thus far the high school diploma has proven to be a good measure of the potential of a candidate.

We divided candidates into four categories. We placed those who scored the highest on our Armed Forces Qualification Test in categories one to three and those who scored the lowest in category four. Also we set an admission limit of less than 2% of category-four candidates. We have been below that limit for some time.

We have realized that education is a fundamental building block for our organization. We not only accept the candidates the society gives us but we also improve their education either through college or on-the-job training. Some of the best recruiting and retention programs of the Army have to do with furthering people's education.

Herbert Gerjuoy (1998) states that the new learners must be taught how to classify and reclassify information, how to evaluate its veracity, how to change categories when necessary, how to move from the concrete to the abstract and back, how to look at problems from a new direction, and finally how to teach oneself. He writes, "Tomorrow's illiterate will not be a man who cannot

read: he will be the man who has not learned how to learn" (p. 414). Do you agree with this opinion?

Yes, I do agree with this opinion. One of the great strengths of the Army is that it is a learning organization. The Army develops in a person the ability to detect a problem and to create solutions. We have a good program in that area and it is improving with technological advancements.

The ways that you think about things and how you learn are important in a variety of ways. The key is to determine what information you need based upon what you are doing, what information I need based upon what I am doing, and to make sure that we get that information at the right level and amount. We do not want to get into information overload.

Although juniors are more comfortable with the information-age technology than their senior counterparts, they should not presume that technology will give them the right answers all the time. We need to apply a healthy dose of experience to their enthusiasm, and then we will really have something. We have a responsibility and the capability to do that as a part of Army education, training, and experience.

People who "have the future in their bones" are drawn into technology. Just like the 21st *Century Warrior of the JV 2010, such people strive to act independently, make quick decisions, weave their way through the novel environments, and excel in teamwork. How does a soldier become a Joint Vision Warrior?*

Through training. We replicate the battlefield as closely as we possibly can, and we put our leaders and soldiers under battlefield pressure. By making it as realistic as possible in our training, we prepare them to make those decisions and to use available information. We approximate our simulations to combat conditions. Because we will never be able to take completely the fog of war out of our combat operations, we will always face a little bit of unknown. But the closer we replicate the battlefield conditions in our training programs, the better prepared we are.

We have made gigantic improvements in such combat training programs as the National Training Center and the Joint Trainers' Training Center. They put commanders under a great deal of pressure. In laboratories they teach them the skills they need in real operations.

I am very proud of the Army achievements in that area. We lead the nation and, most likely the world, in our ability to simulate combat.

Why is the Army doctrine taught?

We teach doctrine to establish a common understanding and common definitions of basic terms. For example, the expression "a deliberate attack" should evoke the same meaning to you, to me, and to Private Smith.

An army's doctrine is similar in function to a football team's playbook. It solidifies our foundation of understanding for a variety of professional functions.

You identify education as an integral part of leadership. What makes up the education of a leader?

Education of an Army leader is like a three-legged stool. One leg is the personal development that each of us as individuals has a responsibility to do. That includes the readings that you do on your own time, your own analysis of yourself, and finally how you shore up those areas in which you find yourself lacking.

The second leg of the stool is the formal Army education. We bring soldiers in and they go through basic training followed by an elaborate non-commissioned officer education system. It starts at corporal, the first NCO rank, and continues all the way up to sergeant major. We bring officers in and they go through the basic and advanced courses, next through the mid-level training at Command and General Staff College, and then on to the Army War College.

The third leg, which in my opinion is very important, is operational experience. It is the experience of working in a unit, of going through simulations with its members, of training alongside of them, and being deployed with them. It turns learning into doing and continues the education by learning from doing.

Thus the sum of those three elements—individual development, formal education, and experience—makes up the education of a leader.

Could you describe the role of an Army leader in educational matters?

Army leaders rely on education to set the tone and to improve the performance of their units. A leader has to overcome a tough challenge of getting the right balance among education, training, and overall quality of military life. The most successful leaders that I have seen are the ones that get that balance right.

How did your formal education at the U.S. Military Academy and Shippensburg State College prepare you for your service?

The Military Academy and Shippensburg State College reinforced what the Army had done, and that was to teach me *how* to think rather than *what* to think. Also, the Military Academy taught me something that was not in the book—how to manage time. I just had to go through that experience to figure out how important time was and how well I had to manage it.

Do you still remember your favorite teachers?

Yes, I remember all my grade school and high school teachers. They all had a tremendous impact on me because they taught me about the importance of learning and, most

important, they reinforced the values that my parents instilled in me.

You speak often of instilling reading habits. What are your favorite books?

My favorite books are those depicting military life such as *Citizen Soldiers* by Stephen Ambrose and *Once an Eagle* by Anton Myrer. *Once an Eagle*, a popular novel among Army officers, focuses on two Army officers, one by the name of Courtney Massengale and one by the name of Sam Damon. They represent two different styles of leadership. Courtney Massengale is a self-centered individual who steps on anybody to get ahead because he feels that his promotion is good for the organization and it certainly is good for him. Sam Damon is somebody who focuses on his subordinates. He is their role model and is loved by them. He is a hard driver, who makes things happen, but he takes care of those below him.

If you ask Army officers whether they have read *Once an Eagle*, most of them will say, "Yes, I have read the book." If you ask whether they consider themselves a Courtney Massengale or Sam Damon, they will say, " Sam Damon." I hope they are correct. We have to have more Sam Damons in the Army. We should all aspire to his image.

In general, I enjoy reading books on military, political, and science subjects. Lately, I read some interesting history books by Michael Howard and social science books by Peter Senge.

In Leadership *you point out that we should be learning not only from the present but also from the past. Why do you consider this type of learning important?*

We need to learn from the past to avoid repeating mistakes. Nevertheless it is futile trying to make the past perfect. Once we understand what brought us to the here-and-now point, we need to concentrate on making tomorrow better and preparing for the future.

Take Desert Shield, for example. It took us over 20 days to close a brigade-sized force. Afterwards we realized that we might not have the luxury of time to close our forces during the next conflict, so we have started emphasizing strategic mobility. Where once we needed three weeks to close a brigade-sized force in Desert Shield, we can now, through pre-positioned equipment in Southwest Asia, do so in less than four days.

You served as a second lieutenant in Vietnam. What did you learn from this experience?

I learned a lot from this experience. It stuck with me throughout my career. There were good and bad lessons learned in Vietnam. I tried to turn them all into the positive.

I joined two other Americans who already were attached to a Vietnamese battalion. In time, we built up the team to five Americans. We experienced continuous turmoil in Vietnam. We could not build cohesion there

because we were turning over people too often.

Among other things, out of Vietnam, we learned the hard way about the importance of teamwork and cohesion. Consequently, we strengthened cohesion and teamwork by focussing on unit deployment rather than on individual assignments. Now instead of assigning individuals, we deploy units. Thus we can plan individual tours better and provide better care for the families involved.

You state in the Greenbook article "America's Army" (1999, March) that the Army has come far in training integration. Could you give our readers a few examples of it?

We integrate training of active and reserve components. Training three enhanced National Guard brigades under an active division at Fort Riley and Fort Carson is a good example of integration. At a lower level, we have improved training by embedding active personnel into some reserve units. We have also applied a teaming concept in which an active component division and a National Guard division work together.

The best example of integrating of the three components is the First Calvary and the 49th Division. The First Calvary just completed rotation in Bosnia. The 49th will pick up the rotation after the 10th Mountain Division completes theirs. By integrating the three components, we have gained great strength. Thus we have broadened the base to handle these myriad requirements through training integration.

How could civilian institutions of higher learning benefit from the methods of Army training?

There are a number of ways that institutions can benefit from our training and education models. The hallmarks of military training, the ability to create a team and the practice of doing a hard-hitting after-action review, could be incorporated into civilian education. A lesson is not considered fully taught in the Army until all participants complete an after-action analysis. That is the way to improve the team. Everybody could learn from our model.

Did you use new technologies for communication purposes?

I used the information tools in my peacetime duties to communicate with the general officer corps and the Army leaders through e-mail. The entire Army is switching from the industrial-age to the information-age communication tools.

The more we use these communication tools in peacetime, the better we are fit for wartime during which situational awareness and information dominance are critical. On the other hand, we should not be captured by technology and find ourselves doing nothing but sending e-mail messages. We should maintain the right balance between the new efficient means and the old successful ones. We must cultivate the skills of communicating person to person and face to face. It goes back again to the principle that the Army is

composed of people, and people need face-to-face communication.

The greatest technologies that we possess are the human mind and the human spirit. How we go about capturing those is what truly matters. We need to leverage the tremendous capability we have in our people. That is what the Army is and what it will continue to be all about.

As a result of geographical limitations and financial constraints, military education occurs in a variety of settings. To what extent has the military used technology to create informal learning settings under your leadership?

I promote distance learning. It keeps us abreast of technological change and of the Army's modernization. For some subjects, distance learning enables us to take the classroom to the student as opposed to transporting the student to the classroom. This mode of learning facilitates meeting the Total Army training requirement. In most cases, such learning is better suited to an Army with world-wide responsibilities.

We have launched the Army down that path. We have not arrived at where we need to be, so we need to continue to push in that area. We are going in the right direction.

As a military commander, did you promote communication skills in the military?

During my four years as Army Chief of Staff, I promoted listening in particular. I talked to the participants at every pre-command course about its importance. I told everyone that listening is an important part of communication, "The Good Lord gave you two ears and one mouth for a purpose. He wanted you to use them in that proportion." Moreover, I spoke to the commanders about the importance of communicating with their soldiers, and particularly listening to their concerns, understanding their needs, and fulfilling them.

Most of us tend to speak more than to listen. To have effective communication, we need to sharpen our listening skills.

What will be the impact of the new technologies on the upcoming generations?

The world as a whole is once again going through a change, and as usual the coming generation of soldiers is more suited to the days ahead than those who are here today. Those of us with gray hair are not as comfortable with computers and other information-age devices as the young people. They are the ones that we learn from.

In the *Force XXI* experimentation, we gave our young soldiers the new computerized devices and told them to run a test. Afterwards, they suggested improvements. Their exposure to these new technologies since childhood makes them better suited to experiment with them.

Traditionally there always has been some resistance to technological

developments. Samuel Morse's promise to link places as far apart as Maine and Texas brought the reaction, "What do Maine and Texas have to say to each other?"(Burke, 1998, p. 17). Have you encountered a resistance in the military to technological applications?

There is always a tension between new technology and the status quo. Some people are satisfied with the last application of technology and resist further changes. Others embrace technology eagerly even if there is no clear and present need.

The key job of the Army leadership is to determine the nature of technological applications and their assimilation pace.

Army military and civilian personnel standardized and consolidated a variety of databases into a common operating system. Could you give our readers the rationale for a common system?

This common operating system is the basis of common awareness and information dominance on the battlefield. It is one of the pillars of tomorrow's knowledge-based Army that I talk about so often.

We want to give the same battlefield picture to the people at squad, division, and corps levels. Common operating systems provide that situational awareness. Knowing where you, your buddies, and your enemies are, gives you an advantage on the battlefield.

In January 1999 you viewed the 21st *century truck program at the National Automotive Center. That program was developed through military-commercial partnership. Could you tell us how such a partnership benefits the society?*

It creates a win-win situation. I was curious about where industry was going with alternative fuels. I looked into environmentally sound highly mobile fuels and their applicability to the Army needs.

We can develop alternate fuels that will benefit both the civilian and the military industries. Through a military-civilian partnership, we can use research and development dollars to pull forward the available technology. We need to broaden a partnership with civilian industry because many things that are used in everyday life would also work in the military.

Why is reduced fuel consumption such an important issue?

Fuel is a great hindrance on the battlefield because it is heavy and bulky. The more we can reduce fuel requirements, the better off we are.

During your visit at TAACOM you viewed some vehicles based on fuel-cell technology. What were your impressions of them?

Both the fuel cell and the electromagnetic gun hold considerable promise. In general, the Army is interested in these technologies because they would reduce our strategic mobility requirements.

You stated that throughout history the Army major challenge has been getting to the fight. What initiatives have you undertaken to meet this strategic challenge?

Strategic mobility has always been important to us. It is getting even more important in today's global economy. The challenge is the same as it was during the Civil War, "to get there firstest with the mostest."

Strategic mobility involves more than the weight and dimensions of our systems. It involves the efficiency of our logistical system to include spare parts and ammunition. To reach the required level of strategic mobility, we must apply a "full court press" in all these areas.

Richard A. Woytak (1985) described the certification process of the Army light division in an extensive monograph. What are your thoughts on this concept?

The light division is an important option because of its mobility. In some cases it fits the requirement perfectly. Predominantly we need a mix of forces—heavy, light, and special. Furthermore, we need to be able to mix and match better to come up with the right force package for the mission and use the one that fits the requirement the best. We also need to narrow the gap between our heavy and light forces by making the heavy forces more deployable and the light forces more lethal.

As our dependence on technological means grows, so does the vulnerability of survival without them. Even in our everyday life we are occasionally thrown into the 19th century world of candlelight and open fire. Floods and storms occasionally destroy roads, wash out bridges, destroy water tanks, and break telephone lines. With these scenarios in mind, could you comment on the importance of survival skills?

This is one of the interesting challenges that we face. We are not only going through the information age, but are becoming increasingly interdependent with a large part of the world still in the industrial age, some just barely out of the agrarian age. Thus we have to have a full spectrum force that is able to operate in any environment.

We have to face and solve a training and operational challenge of handling operations in all types of environments. Therefore we need to continue teaching the fundamental building blocks of our profession. We should not become so dependent upon information technology that we could not function without its tools. If our technology for some reason fails, we should have a

backup system and skills that enable us to cope and work through that situation.

In the spring of 1996 you launched the Army After Next *project in which the US Army of 2025 was set in a complex and dynamic geo-strategic environment. You said, "Future battlefields will be far different and more complex than the 20th century battlefields"(Reimer, 1999, p. 42). Could you elaborate on this statement?*

We designed our *AAN* heavy forces to be more mobile, our light forces to be more lethal. We also reviewed non-lethal technology to give our soldiers some middle ground between the traditional alternatives of words and bullets.

We ran three *AAN* wargames to find out what the Army might be like between 2020 and 2025. Each of those games was a little different. We followed up on the common themes resulting from each game. The *AAN* will help guide the research and development of weapons systems for the coming generation.

The Army in 2020 will rely in a different way on the reserve components than it does today. For example, the force in the active components could give 12-hour-a-day capability. To get 24-hour-a-day capability, the reserve components are called up. To this end, there will be multiple crews for weapons systems. The future weapons will be far more reliable than those that we have today so that crews can be rotated day and night with little maintenance time.

From a historical perspective, even a small number of casualties generates long-lasting hatred. The murder of Prophet Ali ibn Talib and two dozen followers in 661 has caused a split between Sunni and Shiite Moslems and has generated a conflict between them ever since. Do you think that society at all levels should be trained in conflict resolution?

An important part of the Army mission revolves around conflict resolution. We are figuring out how that should be done. The answer to every problem is not the use of military force because it, in many cases, does not fulfil the objective beyond war. Leaders may win a military victory, but in so doing they do not necessarily set the conditions for peace. To resolve a conflict, they must explore all solutions.

We cannot expect war to be casualty-free. There will never be a pushbutton war that resembles a video game. The problem is that war is an inhumane activity in which people are killed. As a society, we have to reach a consensus that we are willing to sacrifice our lives for the protection of certain principles. We must also decide when that sacrifice is not the best option.

I am concerned about the emphasis on zero casualties. This concept originated from Desert Storm during which we conducted ground-combat missions of 100 hours with less than 100 casualties. Commanders at all levels believe that we should do everything possible to minimize casualties, but we have to understand that we cannot expect our wars to have zero casualties. We should do everything possible to minimize casualties, but we also need to accept the fact that a casualty-free war is not a realistic objective.

Contemporary movies glamorize the concept of winning as a scene of a loser's destruction and death. Yet, winning *is a complex multi-faceted concept. To General MacArthur, this concept entailed imposing will power on another nation rather than physical demise.*

The genius of MacArthur surfaced in his creation of the post-war environment in Japan. He did not treat the Japanese people as victims or losers. To a great extent, the Japanese are what they are today because of MacArthur's approach to the post-war environment. By creating a win-win situation, he set Japan on a successful path.

The general demonstrated the ability to apply the tremendous force of an iron fist and, at the same time, the ability to reach out with the soft touch of a velvet glove. Those are the warrior skills that we have to recognize and develop.

You mentioned that relations between the press and the military have improved since Desert Storm. Several journalists joined the Army platoons advancing into the Bosnia region. Why was the media integrated into front-line activities?

We imbed the media in our units because we live in an information age and we also realize that soldiers are our best source of information. The American people are not only entitled to television news reports, but they have become accustomed to them. CNN and the other worldwide networks have an impact on how the American people view the world. They broadcast in almost every living room in the United States.

Because we need to protect our soldiers, we have to make sure that the reporters understand our security concerns. We would not want them to do anything in the name of the people's right to know that would endanger soldiers. However, an accommodation for the press to report from the front has been worked out.

*Lieutenant Colonel Alexander in "*The Future War: Non-Lethal Weapons in the *21st* Century Warfare*" points out the futility of solving conflicts by resorting to overwhelming force. He writes that a faction or a group conflict can be repressed by force for long periods. Yet, once the physical repression is relaxed, the conflict resumes. Solving the conflict by force evokes passion. When passion gets out of control, retribution seems justified. The cycle continues. What can we, as a nation, do to tame this negative cycle?*

The nation needs to use all available tools for conflict resolution. If you are not careful and you have a good hammer-like military force, every problem may look like a nail to you. Your temptation to use that military force may not be the best long-term solution. There are other ways to solve a conflict such as negotiations or economic sanctions. Those in many ways may bring about more lasting changes.

We can put a lid on the problem by force. Afterwards, how long do we want to keep the lid on? When that force leaves and the conflict resumes anew, what good have we done?

We need to spend more time on making the critical decision whether to use military force or not. Once a decision is made to use military force, it should be overwhelming.

Some experts on terrorism believe that the use of overwhelming force in countering terrorists or international criminals is unwarranted. They recommend use of non-lethal weapons instead. Would you agree with this opinion?

It should be handled on a case-by-case basis. Typically the conventional overwhelming force does not apply to terrorist attacks because they are asymmetrical.

In general, if we are going to use military force in either conventional or counter-terrorist operations, let us move with sufficient force to get the job done. Also let us ensure that we do not use too little force initially and continue adding more force. We should have learned in Vietnam about the weakness of gradually expanding military engagement (little at first and more later).

To fullfil the need for non-lethal training, the Army organized a course titled "Non-Lethal Individual Weapons Instructor Course." What created this need?

The post Cold-War world created this need for a diverse mission. It is a shaping peace-enforcing mission. You do not want to harm or kill the people that you are confronting. Non-lethal means give you the opportunity to make them follow your instructions.

Currently, approximately 550 international terrorist organizations are operating around the world. Should the Army be prepared to respond to terrorist attacks?

Not only the Army. We, as a nation, must be prepared to deal with the potential of terrorist attacks. In that type of situation there will be a role for the military although it is not clearly defined at this time. It gets into constitutional issues and the freedom that we enjoy here. It also gets into the degree of that freedom we are willing to give up for protection from terrorist attacks. It is a tough issue for the nation.

If we were to experience a terrorist attack, the military would be involved in some way, and we must be prepared for that. Consequently, we have taken a look at how the Total Army can provide support in this area.

We designed ten rapid assessment and identification detachments around the United States to work with civilian authorities in the event of a terrorist attack. There is more that the military can do. On the other hand, we need to avoid stepping over the line of constitutional freedoms. Let us discuss

this issue.

President William J. Clinton said that in fighting terrorism there "should be no dividing line between Muslims and Jews, Protestants and Catholics, Serbs and Albanians, developed societies and emerging nations." Is there a need for an international defense strategy against terrorism?

His point was that everybody in the civilized world should condemn terrorist attacks against innocent people. That is absolutely right.

There are benefits and there are definitely disadvantages associated with an international corps. I do not believe that an international corps is the answer to the problem right now, but I certainly believe that every civilized person in the world should abhor and condemn terrorism.

Colonel John Alexander wrote in The Future War (1999) *that information warfare transcends a traditional conflict. According to 1997 DoD pamphlet "Information Warfare," the latter augmented by economic warfare could lead to information blockade or information imperialism. Former Air Force Chief of Staff, General Ronald R. Fogelman, refers to it as the fifth dimension of warfare. Should we be aware of a potential impact of information warfare on our lives?*

As we become more dependent on information technology, we expose certain vulnerabilities and we must guard against them. For example, somebody able to control information could temper with the banking system and thereby the world economic system. We need to be conscious of this issue and be prepared to cope with it.

Defining the boundaries of national sovereignty emerges as an emotional and important task. With it, comes the greater and perhaps more difficult task of creating a policy regarding the responsibilities and complications that result from escalation of national problems to the regional or global level. At what level should conflicts be resolved?

Conflicts are best resolved at the lowest level possible. Some conflicts can be resolved at the local level. On the other hand, as you escalate up the ladder, there is a certain standard of conduct that is expected from civilized nations. You cannot have a neighborhood where laws do not mean anything. As globalization progresses, our dependence on the rest of the world increases. We cannot have hot spots of anarchy in the global neighborhood. It is an important issue that needs to be discussed at all levels.

References

Ainsley, J. R., & Riordan, J. (1999, Spring). DOD and the change paradigm: Change agents versus established service roles, missions, and cultures. *Acquisition Review Quarterly.*

Alexander, J. B. (1999). Future war: Non-lethal weapons in twenty-first-century warfare. New York: Thomas Dunne.

Brownlee, R. L., & Mullen, W. J. (1987). *Changing an Army: An oral history of General William E. Depuy.* United States Army.

Burke, J. (1999). *The knowledge web*. New York: Simon and Schuster.

Fishel, W.R., & Hausrath, A. H. (1958). *Language problems of the US Army during hostilities in Korea*. Chevy Chase, MD: The Johns Hopkins University.

Gerjuoy, H. (1998). *Power shock.*

Gilmore, G. J. (1998, October 8). Army "as small as it can go," *Army News Link.*

Gilmore, G. J. (1999, June 2). Reimer talks about soldiers, his successor, change, Kosovo. *Army News Link.*

Gilmore, G. J. (1999, Dec. 3). Future Army will still feature soldiers with "boots on the ground." *Army News Link.*

Gingrich, N. (1995). *To renew America.* New York: HarperCollins.

Ketchum, R. M. (Ed.) (1958). *The Revolution.* New York: Simon & Schuster.

Kidder, R. M. (1989). *Reinventing the future: Global goals for the 21st century. The Christian Science Monitor.*

Kirby, S.N., & Theil, H. J. (1998). "Managing" the enlisted force: Whistling in the wind? *Armed Forces Society*, *24/4*.

Luttwak, E. N. (1985). *The Pentagon and the art of war.* New York: Simon and Schuster.

MacArthur, D. (1962, May). Duty, Honor, Country. West Point.

Matthews, L. J. (1998). *Challenging the United States symmetrically and asymmetrically: Can America be defeated?* PA: Carlisle Barracks.

Miles, D. (1995, July). New CSA: Reimer takes command. *Soldiers*.

Myrer, A. (1996). *Once an eagle.* Carlisle, PA: Army War College Foundation Press.

Paine, T. (1857). The crisis. In *The political works of Thomas Paine.* Chicago: Belfords and Clarke.

Perret, G. (1996). *Old soldiers never die: The life of Douglas MacArthur.* New York: Random House.

Pike, L. (1998, Nov. 16). Chief of Staff troops the line at Fort Bliss. *Army Link News*.

Posstrel, V. (1998). *The future and its enemies*. The Free Press.

Reimer, D. J. (1995, May). Reengineering forces command for the 21st Century. *ARMY.*

Reimer, D. J. (1995, September-October). Soldiers are our credentials. *Military Review.*

Reimer, D. J. (1995, October). Maintaining a solid framework while building for the future. *ARMY.*

Reimer, D. J. (1996). AUSA Dwight D. Eisenhower Speech.

Reimer, D. J. (1996, January-February). Leadership for the 21st Century: Empo werment, environment and the golden rule. *Military Review.*

Reimer, D. J., & Fogelman, R. R. (1996, Spring). Joint warfare and the Army-Air

Force team. *Joint Forces Quarterly.*
Reimer, D. J. (1996, July-August). Training our Army's top priority and don't you forget it. *Military Review.*
Reimer, D. J. (1997). Army language needs for the new century. *Applied Language Learning. 8*(2).
Reimer D. J. (1997). Shape, prepare, respond. *Quadrennial Defense Review.*
Reimer, D. J. (1998, January-February). Developing great leaders in turbulent times. *Military Review*.
Reimer, D. J. (1998, September). Senate Armed Services Committee Hearings.
Reimer, D. J. (1999). *General Reimer Digital Library.(On Line). Available:*
Reimer, D. J. (1999) *White Paper:* One team, one fight, and one future.
Reimer, D. J. (1999, January 25). The Army in a year of transition. Remarks to the Reserve Officer Association. Washington, DC. Reimer, D. J. (1999, February 10). *http://www.house.gov/hasc/testimony/106thcongress/99-02-10reimer.htm*
Reimer, D. J. (1999, March). America's army—The world's best army. http://www.hqda.Army.mil/leadingchange/Articles_Speeches/greenbf.htm
Reimer, D. J. (1999, Spring). The Army Ater Next: Revolutionary transformation. *Strategic Review, 27*(2).
Reimer, D. J. (1999, May-June). Challenge and change: A Legacy for the Future. *Military Review.*
Reimer, D. J. (1999, May-June). Leadership Doctrine:Turning challenge into opportunity. *Military Review.*
Rhen, B. A. (1999, June 23). Army bids Reimer farewell after 37 years of service. *Army Link News.*
Sapolsky, H., & Shapiro, J. (1996, Summer). Casualties, technology, and America's future wars. *Parameters.*
Semiannual race/ethic/gender profile of the Department of Defense and the US Coast Guard. (1999, March). Pamphlet #99-1. Patrick Air Force Base, FL: Defense Equal Opportunity Management Institute.
Silverberg, D. (1995, October). Trained and ready. *Armed Forces Journal*.
Shelton, H. H. (1998, Fall). Contingency operations in an uncertain world. *Strategic Review, 26*(4).
Small, S. C. (1998, March-April). Women in American military history, 1776-1918. *Military Review.*
Toffler, A. (1990). *Power shift: Knowledge, wealth, and violence at the edge of the 21st century.* New York: Bantam Books.
Woytak, R. A. (1988). *Validating the Light Infantry Division concept and the Certification of the 7th Infantry Division*, 1984-1987. Washington, D. C.:TRADOC.

Applied Language Learning
2000, Vol. 11, No. 1, pp. 75-97

Overt and Covert Prestige in the French Language Classroom
When Is It Good to Sound Bad?*

John Hedgcock
Monterey Institute of International Studies

Natalie Lefkowitz
Central Washington University

Foreign language (FL) educators and researchers have displayed a persistent interest in the formal, pedagogical, psycholinguistic, and sociolinguistic variables that promote and prevent the development of effective oral skills. One of the socio-affective factors known to influence the acquisition of effective FL pronunciation skills involves social status and prestige as instantiated in the classroom setting. This study examines the performance and perceptions of 100 university-level learners of French as a foreign language (FFL), with a view toward exposing the impact of social pressure in the learning environment. The analysis also addresses the contradictory nature of learners' perceptions of what it means to "sound good" when speaking French. An inventory of frequent phonemic and phonological errors as well as the results of a comprehensive survey of perceptions, beliefs, and attitudes suggest a fairly homogeneous value system that favors a pedagogical norm (Valdman, 1976). At the same time, outcomes point decisively to a desire among participants to establish group solidarity and please their peers. Implications for research and teaching are outlined.

As the language teaching profession evolves and assesses its progress over time, certain central concerns seem to recur. Naturally, some questions receive more attention than others, depending on prevailing methodological and ideological currents (Musumeci, 1997). For example, the emphasis on particular skill areas has shifted considerably since the middle of the twentieth century, with interactive literacy as well as oral fluency achieving prominent places in communicative approaches to language instruction (Blair, 1991; Brown, 1994; Celce-Murcia, 1991; Hadley, 1993; Oller, 1993; Prator, 1991; Rivers, 1987; Savignon, 1997).

For many foreign language (FL) educators, including teachers of French, one of the most difficult instructional challenges continues to involve the teaching of effective oral and aural skills. Teachers and materials developers understandably assign speaking and listening skills a high priority because of the now axiomatic presupposition that learners want and need to interact meaningfully with speakers of their target languages in naturalistic contexts (Celce-Murcia, Brinton, & Goodwin, 1996; Dansereau, 1992; Hadley, 1993; Valdman, 1993). Enabling learners to develop reasonably target-like pronunciation is also a singularly important yet elusive goal that is often featured prominently in FL syllabi and curricula in the North American educational setting (Rivers, 1981, 1989).

Despite the central role played by speaking and listening practice in the vast majority of FL curricula at all levels of instruction (primary, secondary, and post-secondary), building learners' oral and aural proficiency continues to pose a sometimes intractable difficulty for classroom practitioners (cf. Celce-Murcia, Brinton, & Goodwin, 1996; Ioup & Weinberger, 1987; Pennington, 1994; Pennington & Richards, 1986; Selinker, 1992). Our experience as language instructors supports the informal observation that approximating a genuinely target-like level of aural perception and oral production may be a reasonable expectation for more advanced and experienced classroom learners. We would not wish to suggest, of course, that oral skills development should not be emphasized in any FL curriculum or syllabus. Rather, we would maintain that, because success in bringing beginning and intermediate learners to an appropriate threshold of aural/oral proficiency is so variable, the need to understand the factors that limit instructional success is as acute as ever.

Social Determinants of FL Aural/Oral Skills Development

Continued efforts to develop FL phonological awareness and speech skills among language learners have, of course, been informed by the findings of empirical research designed to investigate various aspects of perception and production (e.g., Coppieters, 1987; Dansereau, 1995; Ioup & Weinberger, 1987; Long, 1990; McCandless & Winitz, 1986; Nadasdy, 1995; Neufeld, 1978; Neufeld & Schneiderman, 1980; Pennington, 1994; Salaberry & Lopez-Ortega, 1998; Suter, 1976; Tarone, 1978). This extensive work notwithstanding, we are perhaps still a long way from knowing exactly what determinants underlie the so-called "failure" of many classroom learners to achieve fluent and accurate aural and oral skills, at least in the FL setting. Nevertheless, a number of factors believed to inhibit the development or aural/oral proficiency have been identified and may lead to a deeper and broader understanding of the network of socio-educational and psycho-affective dimensions that promote or limit the emergence of a second language sound system.

Among potentially influential obstacles to acquiring target-like comprehension and production are those reflecting psycho and sociolinguistic forces that shape linguistic form and language use in the learning context. Determinants known to have an impact on FL aural and oral

performance include social relationships between learners and the FL discourse community, language and performance anxiety, learner motivation, and peer pressure within the classroom setting (Colletta, 1985; Eckert, 1989; Elliot, 1995; Hardy, 1993; Horwitz & Young, 1991; McKay & Hornberger, 1996; Rampton, 1996; Sisón, 1991). All of these variables may at one level or another affect the performance of classroom learners and thus merit the attention of language instructors.

This extensive body of research and inquiry provides a useful backdrop for informative investigations of how the socio-affective dynamics of the classroom itself influence learners' auditory and oral performance. Examining the interaction between the sociocultural environment and learner behavior allows for potentially rich insights into why learners behave as they do. In a socially and culturally-based framework, we can view the language classroom as a distinct micro-community (Saville-Troike, 1989) or Discourse (Gee, 1992, 1996) in which participants perform according to implicit and explicit appropriateness norms and behavioral patterns. In such an approach, we can likewise explore the attitudes, beliefs, and performances that characterize the community of practice that individual classrooms constitute (cf. Geertz, 1983; Kent, 1993).

Social Status and Prestige

In any classroom that we construct as a community of practice, teachers may or may not be aware that learners' underlying expectations concerning group and individual participation can govern overt behaviors as well as implicit beliefs and values. One particular value that may prevail in the educational context pertains to membership in a subgroup that enjoys a unique status within the larger classroom community. That is, the need for individual learners to be included in and recognized by a high-status subgroup or faction—the need for some sort of prestige—may have both positive and negative implications for language learning (cf. Bourdieu, 1991; Lippi-Green, 1997; Peirce, 1995). In the FL setting, where learners' egos may frequently be threatened, the need for solidarity and inclusion can be crucial (Cummins, 1994; Horwitz & Young, 1991; McCroskey & Richmond, 1991; Savignon, 1997; Schumann, 1976, 1978; Sisón, 1991).

The subject of considerable research among sociolinguists, social prestige as manifest in spoken language refers to the status gained by speakers due to the dialect(s) or variety(-ies) that they are most typically known to use. The construct is familiar to dialectologists and has received extensive coverage in the sociolinguistics literature (see Ager, 1990; Finegan, 1987; Graddol & Swann, 1989; Holmes, 1992; Hudson, 1996; Lippi-Green, 1997; Preston, 1989a, 1989b; Sanders, 1993; Scherer & Giles, 1979; Trudgill, 1972, 1996; Wardhaugh, 1998, *inter alios*). Overt prestige often describes the respect or social stature attributed to users of a perceived standard variety or preferred "accent" within a discourse community. Generally, an overtly prestigious dialect receives favorable ratings on scales of socioeconomic,

educational, and occupational status. The English varieties spoken by BBC presenters, for example, can be said to enjoy overt prestige because, for many users of English, "BBC English" represents a kind of linguistic benchmark (cf. Baron, 1982; Thomas, 1991; Wardhaugh, 1998; Williams, 1992). Similarly, Parisian French and Florentine Italian constitute established "standards" to which speakers of non-Parisian and non-Florentine varieties, including learners of French and Italian, may be expected to conform. Pressure to adhere to a preferred standard is often generated and sustained by prevailing socio-political, cultural, and educational currents. The notion of a preferred or high-status variety is highly relevant in the context of FL education, since FL curricula and instruction typically target a high-prestige or "standard" variety (Salien, 1998).

People may claim that prestige varieties are particularly admired for aesthetic or cultural reasons, sometimes identifying a "standard" dialect such as Parisian French as superior to "nonstandard" varieties such as Canadian French (Auger & Valdman, 1999; Dickinson, 1999; Lambert, 1967; Salien, 1998). A prestige dialect or standard such as BBC English or Parisian French may thus be viewed by members of multiple speech communities as an inherently "good" model of pronunciation and word choice, regardless of the varieties most commonly spoken by those asked to judge. A common discovery in studies of prestige is that, depending on the social standing of the preferred or prestige variety(-ies), participants do not realize or acknowledge that their own speech may not conform to the "accent" or "standard" that they admire most (Labov, 1972; Preston, 1989a). Research findings as well as anecdotal observation frequently highlight discernible disjunctions between speakers' self-perceptions and their observable linguistic production in naturalistic contexts, a phenomenon addressed in the study reported below.

In contrast to overt prestige, covert prestige refers to a positive predisposition toward the use of nonstandard, or overtly non-prestigious, dialects, vernaculars, and accents. Reflecting a somewhat unconventional view of social status, covert prestige can represent a significant departure from the generally accepted, mainstream values of schools and other social institutions. Covert prestige is an especially intriguing phenomenon in that users of covert varieties and vernaculars seldom acknowledge that they employ a non-prestige linguistic code. That is, participants rarely concede that they value, let alone use, non-mainstream varieties (Holmes, 1992; Trudgill, 1996).

Despite their explicit, "official" denials, however, speakers of covertly prestigious varieties frequently retain their vernaculars or "accents" when interacting with intimates (cf. Tarone & Swain, 1995). Often used as markers of solidarity and group affiliation, covert linguistic forms and patterns (lexical, syntactic, and phonological) may signify positive social attributes such as friendliness, sincerity, trustworthiness, attractiveness, group allegiance, and sense of humor. In empirical studies, covert prestige is often linked directly or indirectly to sociological variables including gender, age, occupation, ethnicity, and socioeconomic class (Ager, 1990; Angler, 1981; Eckert, 1989, 1990, 1991, 1997; Erman, 1992; Labov, 1991; Milroy, 1995). For instance, English speakers may deliberately omit S-V agreement markers, appropriating this clearly

nonstandard pattern as a way of identifying with those who are recognized as speakers of a non-mainstream variety but who, for whatever reason, enjoy a special status. In the FL classroom setting, this phenomenon may present itself in the form of students' producing L1-influenced grammatical errors or pronouncing FL forms with a decidedly strong L1 accent.

Adopting a recognized linguistic code, regardless of its relative social or cultural status, is one of the key ways in which learners establish solidarity with members of Discourses to which they want to belong (cf. Bates & Benigni, 1975; Brown & Levinson, 1979; Clyne, 1984; Gee, 1992, 1996; Lambert & Tucker, 1976; Vigner, 1978). For some classroom FL learners, satisfying this need for solidarity may, in fact, necessitate performing *against* prescribed norms (Eckert, 1989; Savignon, 1997; Tarone & Swain, 1995). By observing the behaviors of learners who enjoy high status and by performing linguistically in an inherently public environment, students may develop unexamined beliefs that are counterproductive to language learning. That is, students may implicitly learn that conforming to a "standard" model of oral production or a "pedagogical norm" (Valdman, 1976) sometimes confers *less* status among their peers than does *rejecting* those norms. The rejection of expected target language forms can actually confer "coolness" and social standing. In other words, sounding "bad" relative to what the teacher wants to teach—particularly, with respect to pronunciation—may actually be quite *good* in terms of achieving and maintaining prestige among one's peers. Clearly, however, these social aspirations, if operative among even a few students, can produce a potentially undesirable effect on the instructor's efforts to cultivate learners' ability to reproduce the pedagogically preferred variety.

The Study

The exploratory research we present here took shape as a result of observing the interactional behaviors of post-secondary learners of French as a foreign language (FFL) in college-level classrooms. Our intuitions suggested that both forms of social prestige, overt and covert, might exert a strong influence on students' willingness to communicate in French, their attitudes toward Francophone culture and the learning environment, in addition to their aural and oral performance (MacIntyre, Clément, Dörnyei, & Noels, 1998; McCroskey & Richmond, 1991). In designing this investigation, we were especially concerned with eliciting evidence of students' measurable verbal behavior, in addition to their perceptions of their own oral performance as compared to that of their peers. Learners' self-professed attitudes can often reflect their aspirations, which can include acquiring target-like oral skills that approximate a prestigious norm. However, on the basis of intuition and informal observation, we suspected that certain types of student behavior (e.g., underperforming *vis-à-vis* the pedagogical norm) would be traceable to underlying (covert) peer pressure. We also speculated that students' oral output would not always correspond with how they perceived their own skill levels.

Research Questions

The findings we present here resulted from the initial phases of a broader investigation of social pressure in a range of classroom FL environments (Lefkowitz & Hedgcock, 1999, forthcoming). The following open-ended research questions undergird the framework of our preliminary data collection and analysis:

1. What is the nature of learners' classroom oral production in French?
2. To what extent do students both exhibit and report linguistic behavior that reflects an awareness of (and desire to achieve) overt prestige in the class room setting?
3. To what extent do learners report the desire to achieve covert prestige by not producing target-like, pedagogical norms in the classroom?
4. In what ways do learners' self-reports reflect a lack of awareness of observable performance, or awareness with a reluctance to admit their actual performance?

We viewed these questions to be broad enough to generate meaningful and interpretable results but narrow enough to lead to a productive reworking of our materials and overall design. The approach we have adopted here is thus essentially inductive and hypothesis-generating (Seliger & Shohamy, 1989).

Method

Participants

Drawn from six sections of first- and second-year FFL courses at three U.S. universities, the 100 participants in this study included 27 male and 73 female undergraduate students. 97 of the participants identified themselves as native speakers of English, while the three nonnative speakers reported that English was the primary language used at home. The mean age for the sample was 22.3 years.

Materials, Procedures, and Analyses

Two types of data form the basis of this project: (1) audio recordings of six 50-minute FFL classes and (2) responses to a 46-item questionnaire designed specifically to detect participants' awareness of social prestige and peer pressure in the FFL classroom. The questionnaire was constructed to query students about possible interactions between peer relationships and their pronunciation behaviors (please see Table 1 for a partial reproduction of survey items).

We elected to collect and analyze audio recordings over video recordings to avoid unnecessarily influencing students' and instructors'

classroom behaviors. Although it is perhaps impossible to avoid researcher effects entirely (Brown, 1988; Seliger & Shohamy, 1989), we found the use of a tape recorder to be highly unobtrusive. Recordings made in each class section were analyzed for the frequency of specific phonological and phonemic errors that occurred during the course of routine classroom interactions, including both teacher-fronted sequences and collaborative peer/group activities.

Pronunciation error categories are based on those featured in French phonetics textbooks and instructional guides (e.g., Carduner & Hagiwara, 1982; Dansereau, 1992; Léon, 1966; Rivers, 1989; Valdman, 1993). Phonetic error types were thus selected for the particular challenges they are known to pose for novice anglophone learners. Although a wider range of mispronounced phonemic and phonological forms occurred in the data, those listed in Table 1 were frequent enough to allow for a comparison across the six sections. We report error tallies for each audible phoneme, feature, or rule, as well as a total number of errors for each class section.

The questionnaire instrument was constructed to elicit not only descriptive information about student demographics and language learning histories, but also their perceptions concerning the following variables: their progress in acquiring spoken French, their current oral performance, their peers' oral performance, their teachers' ability to provide authentic models of pronunciation, and their ability to identify a "native-like" French accent. Furthermore, prompts were provided to elicit students' views of their own and others' social standing in the classroom environment. Descriptors also asked participants to report on the socio-affective conditions most favorable to their own target-like oral skills and pronunciation. The instrument features Likert-style statements as well as open-ended prompts to which students replied in prose form. Table 1 displays a subset of the former, along with the corresponding response frequencies and sample means. In keeping with the inductive nature of this investigation, the survey was formulated with the intention of eliciting input that could be used both to improve the instrument for subsequent administration and to reformulate research questions, if necessary.

Questionnaires were administered within a two-week period during regular class sessions in which participants were asked to supply responses based on their first impressions of the 34 Likert-style items. The six open-ended prompts generated outcomes that led to a series of ethnographic interviews with a number of participants in the study (Lefkowitz & Hedgcock, 1999, forthcoming). Students' prose responses were also used to refine a number of the questionnaire prompts. Due to the exploratory dimension of the study, no inferential statistics were performed.

Results and Discussion

The initial research question inquires into students' awareness of linguistic behavior that reflects a role for overt or covert prestige in the classroom setting. With respect to observed oral output and learners' self-reported

perceptions, we can see a somewhat predictable disjunction. The results shown in Table 1 indicate that phonetic and phonological errors were frequent and sometimes abundant, a clear reflection of persistent, non-target-like pronunciation in FFL. It should be acknowledged, of course, that the totals reported in Table 1 represent only raw frequencies: No inferences regarding students' current or potential oral proficiency in French should be made on this basis.

Table 1. French Pronunciation Error Frequencies

Phonemic or Phonological Error Type	*Class Section*						
	C1	*C2*	*C3*	*C4*	*C5*	*C6*	*Σ*
u ~ y	5	6	2	6	6	4	29
ø ~ œ	9	1	2	1	9	0	22
e ~ ɛ	4	2	2	2	4	0	14
o ~ ɔ	1	2	2	2	4	0	11
a ~ ɑ	0	0	0	0	1	0	1
i ~ I	1	1	2	1	1	0	6
j	0	0	1	0	1	0	2
e^j	6	0	7	0	14	8	35
i^j	0	0	5	0	0	0	5
o^w	3	0	0	0	1	1	5
u^w	0	0	1	0	1	1	3
$\tilde{\varepsilon}$	1	6	1	6	2	0	16
$\tilde{o}$	1	0	1	0	1	0	3
$\tilde{a}$	0	4	0	4	1	0	9
ə	3	2	6	2	4	4	21
R	10	8	3	8	20	8	57
s	4	0	0	0	1	1	6
l	3	0	2	0	2	1	8
n	1	0	0	0	0	0	1
stress	3	0	0	0	0	2	5
liaison	0	0	0	0	2	0	2
elision	0	0	2	0	0	0	2
t (fem.)	0	0	0	0	2	0	2
s ~ z	0	0	0	0	4	0	4
Σ	55	32	39	32	83	30	271

What the numerical values can tell us, however, is that learners at the first- and second-year level do, in fact, produce malformations in their oral

Table 2. Selected Questionnaire Response Frequencies

1 = Strongly disagree 3 = Somewhat disagree 5 = Agree NA = Not applicable
2 = Disagree 4 = Somewhat agree 6 = Strongly agree (No experience)

Item No	*Descriptor/Belief Statement*	*NA*	*1*	*2*	*3*	*4*	*5*	*6*	*M*
10	I can accurately recognize the difference between native-like and nonnative ("accented") pronunciation in French.	3	5	7	16	27	31	11	4.08
11	I sometimes cringe when my classmates sound very nonnative-like when they speak French and/or when they make little effort to sound French.	6	12	17	10	26	22	7	3.53
12	I reallly don't notice when my classmates produce native-like speech in French.	3	23	29	23	17	5	0	2.51
13	It is very important for me to develop excellent pronunciation in French so that I can sound like a native speaker.	0	4	10	12	35	22	17	4.12
14	I like the sound of French when it is spoken by native speakers and by nonnative speakers with good pronunciation.	3	0	2	3	19	43	30	4.99
15	Occasionally, I deliberately avoid sounding like a native speaker of French.	14	36	22	15	7	2	4	2.17
18	It is important for me to please my instructor when I speak.	0	2	3	4	26	50	15	4.64
19	Sometimes I feel uncomfortable trying to sound like a native speaker of French in the presence of my instructor.	3	13	14	19	21	21	9	3.52

Item No	*Descriptor/Belief Statement (Cont.)*	*NA*	*1*	*2*	*3*	*4*	*5*	*6*	*M*
20	It is important for me to please my peers when I speak in French.	3	13	13	22	34	13	2	3.28
21	My pronunciation in French sounds best in the presence of native speakers of French.	25	16	15	13	18	7	6	3.04
22	My pronunciation in French sounds best in the presence of my instructor.	2	10	8	31	31	15	3	3.43
23	My pronunciation in French sounds best in the presence of peers/classmates whom I know very well (i.e., friends and acquaintances).	2	5	12	29	29	20	3	3.57
24	Sometimes I feel uncomfortable trying to sound like a native speaker of French in the presence of peers/classmates whom I know very well (i.e., friends and acquaintances).	5	14	25	28	18	8	2	2.86
25	My pronunciation in French sounds best in the presence of peers/classmates whom I *do not* know very well.	8	10	24	42	11	4	1	2.76
26	Sometimes I feel uncomfortable trying to sound like a native speaker of French in the presence of classmates I *do not* know very well.	7	12	15	32	19	10	5	3.16
27	My pronunciation in French sounds best in the presence of both my instructor and my peers.	4	11	4	30	36	10	5	3.47
28	Sometimes I feel uncomfortable trying to sound like a native speaker of French in the presence of both my instructor and my peers.	6	9	13	26	30	9	6	3.38

IItem No	*Descriptor/Belief Statement (Cont.)*	*NA*	*1*	*2*	*3*	*4*	*5*	*6*	*M*
29	My pronunciation in French sounds best in the presence of peers/classmates whose pronunciation and oral skills are better than mine.	2	10	21	28	24	13	2	3.15
30	Sometimes I feel uncomfortable trying to sound like a native speaker of French in the presence of peers/classmates whose pronunciation and oral skills are better than mine.	2	10	11	24	23	22	8	3.61
31	My pronunciation in French sounds best in the presence of peers/classmates whose pronunciation and oral skills are *not quite as good as* mine.	5	8	9	28	31	17	2	3.48
32	Sometimes I feel uncomfortable trying to sound like a native speaker of French in the presence of peers/classmates whose pronunciation and oral skills are *not quite as good as* mine.	4	12	21	38	19	5	1	2.86
33	My pronunciation in French sounds best in the presence of members of the *same sex*.	15	15	28	20	16	6	0	2.65
34	Sometimes I feel uncomfortable trying to sound like a native speaker of French in the presence of members of the *same sex.*	10	23	33	24	7	1	2	2.29
35	My pronunciation in French sounds best in the presence of members of the *opposite sex.*	9	19	31	23	9	8	1	2.55
36	Sometimes I feel uncomfortable trying to sound like a native speaker of French in the presence of members of the *opposite sex.*	10	22	29	24	9	4	2	2.44

production during class periods. The values further reflect some of the phonemes and features that characterize learners' non-target-like oral production, providing us with empirical evidence to which we can compare learners' self-perceptions and self-assessments. Our first research question is thus intended not so much to evaluate the accuracy of students' pronunciation with respect to a pedagogical norm as it is to establish a baseline by which to investigate their reported views of themselves, their peers, and their teachers as speakers of FFL. Below we address the matches and mismatches between observed oral production patterns on the one hand and participants' evaluations of their skills on the other.

Table 1 indicates consistent target-like and nontarget like patterns in participants' classroom production. In contradiction to the frequency of measurable errors, however, students quite consistently reported that they aspire to, and aim for, some sort of pedagogical norm (Valdman, 1976). Therefore, with respect to our second and third research questions, we can see that students consistently express support for a prestige variety of (hexagonal) French. For instance, Table 2 shows that more than half of the respondents (55%) indicated that they "cringe" when classmates "sound very nonnative-like" or "make little effort to sound French" (item 11); more than half of the students, therefore, think they have relatively discriminating ears. Similarly, a full 75% of the sample claimed to notice the difference between native-like and nonnative-like speech when listening to their classmates (item 12). Not surprisingly, 86% also agreed that it was "very important" for them to "develop excellent pronunciation in French" so that they could "sound like … native speaker[s]" (item 13). Nearly all respondents (92%) stated that they "like" the sound of French when spoken by native speakers and skilled nonnative speaker (item 14). Hardly inconsistent with what we might expect and hope for, these findings highlight a predictable expressed belief among participants that they aspire to and appreciate a preferred, pedagogical speech norm in French. As a group, the students claimed to know what "sounds good" in French, expressed a desire to "sound good" themselves, and reportedly made concerted efforts to sound as French as possible when using the language in class.

According to responses to items 11-14 and 18, participants systematically claimed that they are sensitive to the preferred classroom dialect and can identify inaccurate, non-target-like spoken French in the classroom. Whether or not prestige plays a role in participants' classroom interactions, respondents did not explicitly convey any desire to achieve covert prestige by speaking French poorly or with a strong American accent. This trend is particularly evident in a number of questionnaire responses, such as items 13 and 18, where students almost overwhelmingly reported wanting to speak French skillfully and to satisfy their teachers' expectations.

At the same time, we should note that a majority of participants reported feeling uncomfortable producing the language with a "native" accent in the midst of close friends and intimates (item 24). Similarly, more than half indicated feeling ill at ease speaking French in the presence of more accomplished peers (item 30). These preferences reveal that solidarity and a desire to

affiliate represent potentially significant if not powerful influences on learners' unexamined beliefs and observable behaviors, including their pronunciation in French (cf. Cummins, 1994; Horwitz & Young, 1991; McCroskey & Richmond, 1991; Savignon, 1997; Schumann, 1976, 1978). In contrast to the primary and secondary classroom environment, where peer pressure can operate in obvious ways, peer pressure in the college classroom setting may manifest itself quite subtly and implicitly (Eckert, 1989). Conceivably, students' error-prone classroom production (notably in class sections 1 and 5) could suggest, among other things, that peer pressure to underperform partially accounts for their discernibly anglicized oral production (See Table 1).

On the other side of the same coin, we can see in responses to item 15 (Table2) that participants consistently deny underperforming. That is, they almost unanimously reject the notion that they would deliberately speak French with a strong American accent or in a way that would contravene their teachers' expectations. Only 13% of the sample reported resisting the classroom standard of pronunciation. Put another way, a full 87% of respondents (1) wrote that they had no such experience or (2) explicitly denied displaying resistance to the pedagogical norm. This apparently emphatic finding, however, is no guarantee that predominant classroom values among the participants are driven exclusively by a desire to achieve overt prestige. As Holmes (1992) and Trudgill (1983) point out, consistent denials on the part of users of vernaculars and covert codes frequently confirm a contradictory, underlying preference for a *non-prestige* variety. In this instance, the non-prestige variety would not actually be a low-status social dialect of French, but perhaps an anglicized version of learner FFL. It remains to be empirically demonstrated that such varieties emerge in FFL classrooms. Nevertheless, one could certainly speculate that such a covert code—a "low-status" variety if compared to the "high-status," textbook variety—might compete with the pedagogical norm in a sort of diglossic situation, as Tarone and Swain (1995) have proposed. Sounding "bad" in FFL might actually offer subtle rewards to those who aspire to be recognized as members of a subversive yet popular faction of the classroom community.

Taken at face value, the data admittedly support convergence on a preferred, pedagogical standard. This undeniable trend notwithstanding, students' responses to several survey prompts hint strongly at a discernible lack of phonetic and phonological awareness. Specifically, survey results show that participants may, in fact, have little or no demonstrable knowledge of the discrepancy between the pedagogical norms that they claim to understand and their observed speech patterns. We can detect an obvious disjunction between students' beliefs about their pronunciation and their observed production, a finding that addresses the fourth research question. Based on approximately 300 minutes' worth of classroom interaction, during which only about 200 minutes involved student talk, 271 distinct phonemic or phonological errors were logged across the six classes. Meanwhile, 69% of the respondents agreed that they could "accurately recognize the difference between native-like and nonnative ('accented') pronunciation in French" (item 10).

Moreover, 55% maintained that they disliked hearing their classmates "sound very nonnative-like" (item 11), and 75% claimed to know the difference between native-like and nonnative-like speech (item 12).

With respect to the fourth and final research question, a painful yet inevitable question naturally emerges from a comparison of these divergent discoveries. That is, if students' abilities to *perceive* skilled, "native-like," or "normative" speech production in FFL are as good as they claim, why are their collective pronunciation errors so frequent? Clearly, a number of variables could underlie this incontestable discrepancy; such variables might include underdeveloped psycholinguistic skills including error detection, monitoring, and self-repair (Fromkin, 1980; Green & Hecht, 1993; Kasper, 1985; Kormos, 1999; Lennon, 1994; Levelt, 1983; Lin & Hedgcock, 1996; MacKay, 1992; Robinson, 1995; Schmidt, 1993; Tarone, 1980; White, 1997). Whereas these linguistic, perceptual, and cognitive factors undeniably come into play in the L2 development of all learners, our questionnaire data indicate that participants' self-perceptions are quite disconnected from their actual speech output in French. What remains to be determined is whether learners can become aware of this discrepancy and ultimately bridge the gap between, on the one hand, their aspirations and self-assessments and, on the other hand, their ill-formed oral production (Gass & Selinker, 1994).

As for tracing a role for social prestige in this discrepancy, our survey results only paint broad-brush strokes on what is certainly a sizable canvas. Because of the exploratory character of the study, the results reviewed here cannot provide conclusive insights. Nevertheless, the outcomes will serve as meaningful input into subsequent inquiry and the formulation of further research questions (see below). At the same time, it might be useful to offer informed speculation on how participants' self-reported attitudes and beliefs about "good" pronunciation square with the social dynamics of the classroom. The trend to converge on the pedagogical standard can be interpreted in possibly two plausible interpretations, which could be complementary, rather than mutually exclusive. In the first interpretation, participants' responses could reflect a conventional motivation to develop "excellent pronunciation in French": After all, three quarters of the students expressed moderate to strong support of this explicit (and expected) educational value (item 13, Table 2).

A second interpretation would maintain that students' professed goals of acquiring a high-prestige, target-like variety of spoken French actually reflect a reluctance to admit that they experience pressure to deviate from the pedagogical norm. For example, the finding that 74% of the sample expressed a desire to "sound good" (item 13) and that 91% aimed to please the instructor (item 18) might compete with participants' unacknowledged but noticeable motivation to please their peers. The number of students who admitted that pleasing their peers while speaking French was evenly divided: 48% claimed that they are not influenced by the desire to impress their friends, whereas 49% indicated that peer acceptance is, indeed, important to them (item 20). A slight majority of students (52%) asserted that their French "sounds better" in the presence of friends and intimates (item 23). 67% denied feeling

uncomfortable speaking French amid friends and intimates (item 24).

This consistent pattern may signify that peer acceptance has a more significant impact on classroom behavior than many learners are willing to admit. Perhaps more striking is that 76% of respondents denied that their French "sounds best" when among strangers and non-intimates (item 25). Put another way, only 16% said that their pronunciation is better in the midst of strangers—ostensibly strong support for a conventional interpretation in which covert prestige is the chief social determinant of learner behavior and pronunciation. However, 59% denied feeling "uncomfortable when trying to sound like a native speaker" in the midst of non-intimates and strangers (item 26). The data thus point consistently toward a positive role for solidarity with peers (Eckert, 1989; Savignon, 1997), but they do not unambiguously imply a negative role for performance anxiety or for a willingness to communicate with non-intimates (cf. Horwitz & Young, 1991; McCroskey & Richmond, 1991; Sisón, 1991).

If anything is clear from these findings, it is that learners' professed beliefs about themselves, about their peers, and about the social environment of the classroom are inconsistent, if not contradictory. Our exploratory research design unfortunately was not systematically constructed to capture all of the potential mismatches between what learners do and what they *think* they do. However, the data provide evidence that participants' survey responses should not be accepted at face value. Indeed, they should be examined from a variety of angles and analyzed more extensively on the basis of alternative data collection techniques (Holmes, 1992; Trudgill, 1996). To provide plausible evidence of a covert prestige hypothesis in the post-secondary FFL context, a precise characterization of the full range of classroom vernaculars, accents, and codes will be necessary (cf. Tarone & Swain, 1995). Likewise, to expose the multiple layers of collective and individual learner belief, a fuller, more inductive exploration of classroom behaviors and attitudes will provide more informed insights into the disjunction between perceived and actual oral performance (Lefkowitz & Hedgcock, 1999, forthcoming).

Among the outcomes of this preliminary investigation is further confirmation of the complex interaction of learner attitudes and measurable language performance. Although not an explicit element of our empirical questions, the attitudinal dimension emerged in exploring the third research question, which pertains to students' beliefs about the target language as instantiated in the instructional context. Participants exposed information about their motivation and their predispositions toward learning FFL, which are no doubt culturally informed and shaped largely by the positive manner in which Francophone civilization (hexagonal culture, in particular) is often popularly viewed (Auger & Valdman, 1999; Salien, 1998). As difficult to discern as they are, attitudinal influences should not be overlooked in any empirical account of language learning or in any inquiry into the instructional process. As Savignon (1997) argues, "if all the variables in L2 acquisition could be identified and the many intricate patterns of interaction between learner and learning

context described, ultimate success in learning to use a second language most likely would be seen to depend on the attitude of the learner" (p. 107).

Implications

The two data sources presented and analyzed here provide findings from which we can draw further empirical questions as well as methodological implications. With respect to devising more focused research questions and identifying new directions for inquiry, we can propose two questions that "piggyback" on those we have investigated:

1. How do we operationalize social prestige (overt as well as covert) in the FL classroom environment?
2. What are the direct and indirect links between the occurrence of prestige forms and learners' observable performances and FL development?

These questions will provide a potentially productive framework for posing pointed methodological problems and solutions associated with some of the shortcomings encountered in completing this study. A purely practical issue to address in subsequent stages concerns capturing more extensive behavioral data that will allow for the detection of a greater number of phonemic and phonological patterns. Characterizing other aspects of student classroom behavior (e.g., social relationships among peers, in- and out-group affinity networks, paralinguistic patterns, etc.) will likewise enrich the quality and meaningfulness of the data. To probe more deeply into learners' belief systems and the development of their attitudes, we have undertaken ethnographic interviews with selected students to understand how they perceive their performance, how they cognize about their pronunciation patterns, and how they view their peers and the instructor as users of not only the pedagogical norm but of a range of less overt vernaculars.

In contemplating the wide range of socio-affective factors that influence learner attitudes toward the target language, variable performance, and ultimate FL attainment, the following questions have also surfaced:

1. Which FFL pronunciation errors and how many of them can be traced to mimicry of the instructor's accurate or inaccurate pronunciation patterns?
2. What are the influences of FFL-specific speech production patterns (e.g., lip protrusion, sentence-final rising intonation, etc.)?
3. At what proficiency level(s) are factors such as overt and covert prestige most and least likely to influence learner production behaviors?
4. How likely is it that phonetics instruction might accelerate FFL learning and enhance accuracy?
5. Other than self-report, what methods can most effectively capture participants' awareness of, and beliefs about, prestige-related phenomena in the classroom?

6. What are the effects of Americans' perceptions of French language and culture on the successful acquisition of French phonemics and phonology?
7. Which generalizations concerning FFL apply to learners studying other languages? To what extent does the self-selecting character of the FFL population distinguish it from other populations of FL learners?

These questions may be of importance to researchers and instructors alike because of the significant impact of social pressure and prestige in the learning and teaching of FFL. U.S. learners of FFL, for example, may select French over other target languages because of the social stature enjoyed by Francophone (particularly hexagonal) cultural icons and artifacts. Popular U.S. culture typically assigns a positive valence to French literature, cinema, fashion, cuisine, travel destinations, and consumer goods. FFL textbooks frequently capitalize on these favorable stereotypes by portraying the French as intellectual and independent, keen on enjoying literature, film, gourmet cuisine, and fine wines (Auger & Valdman, 1999; Salien, 1998). Even ordinary lexical borrowings such as *entrée* and *hors d'oeuvre* may be perceived as having *cachet* simply by virtue of the civilization with which they are most closely associated. The global status of the French language and its speakers, irrespective of the validity of the positive stereotypes connected with them, surely plays a role not only in learners' decisions to study French but also in the expectations that students bring into the FFL classroom. The importance of the aesthetic qualities associated with the phonological features of the language (and, by extension, its speakers) is underscored by the finding that 92% of the students affirmed that they "like the sound of French" (item 14). Whether they consistently and truthfully aspire to this standard throughout their learning is a question that remains to be examined.

Summary

Outcomes of this project indicate that socio-affective factors such as social prestige constitute significant components of the FFL classroom environment that may merit considerably more empirical attention as we embark on a new century of language instruction and research. Results of our study also highlight a distinct mismatch between participants' naturalistic linguistic behaviors and their reported views of pronunciation and interactional behaviors. Although convergence on a pedagogical norm appears to reflect the dominant value in this sample, the discrepancy between students' actual production and their beliefs hints that sociolinguistic and affective variables, including the desire for peer acceptance, might also create an inadvertent and unacknowledged tendency to underperform phonetically in the presence of fellow learners. Researchers and teachers alike may benefit from alerting themselves to the possible emergence of diglossic situations in FFL classrooms, wherein a covert vernacular can coexist or even compete with the pedagogical standard.

Note

[*] A preliminary version of this paper was presented at the 1997 meeting of the American Association for the Teaching of Foreign Language (ACTFL), Nashville, TN.

References

Ager, D. (1990). *Sociolinguistics and contemporary French.* Cambridge: Cambridge University Press.

Angler, J. (1981). Gender and prestige preference in language. *Sex roles: A Journal of Research, 7,* 449-461.

Auger, J., & Valdman, A. (1999). Letting French students hear the diverse voices of Francophony. *Modern Language Journal, 83,* 403-412.

Baron, D. E. (1982). *Grammar and good taste: Reforming the American language.* New Haven, CT: Yale University Press.

Bates, E., & Benigni, L. (1975). Rules of address in Italy: A sociological survey. *Language in Society, 4,* 271-288.

Blair, R. W. (1991). Innovative approaches. In M. Celce-Murcia (Ed.), *Teaching English as a second or foreign language* (2nd ed., pp. 23-45). New York: Newbury House.

Bourdieu, P. (1991). *Language and symbolic power.* Cambridge, MA: Harvard University Press.

Brown, J. D. (1988). *Understanding research in second language learning.* Cambridge: Cambridge University Press.

Brown, H. D. (1994). *Teaching by principles: An interactive approach to language pedagogy.* Upper Saddle River, NJ: Prentice Hall Regents.

Brown, P., & Levinson, S. C. (1979). Social structure, groups, and interaction. In K. R. Scherer & G. Giles (Eds.), *Social markers in speech.* Cambridge: Cambridge University Press.

Carduner, S., & Hagiwara, M. P. (1982). *D'accord.* New York: John Wiley & Sons.

Celce-Murcia, M. (1991). Language teaching approaches: An overview. In M. Celce-Murcia (Ed.), *Teaching English as a second or foreign language* (2nd ed., pp. 3-11). New York: Newbury House.

Celce-Murcia, M., Brinton, D. M., & Goodwin, J. M. (1996). *Teaching pronunciation: A reference for teachers of English to speakers of other languages.* Cambridge: Cambridge University Press.

Clyne, M. G. (1984). *Language and society in the German-speaking countries.* Cambridge: Cambridge University Press.

Colletta, S. P. (1985). *Community and parental influence on student motivation and French second language proficiency.* Ottowa: National Library of Canada.

Coppieters, R. (1987). Competence differences between native and near native speakers. *Language, 63,* 544-573.

Cummins, J. (1994). Knowledge, power, and identity in teaching English as a second language. In F. Genesee (Ed.), *Educating second language children: The whole child, the whole curriculum, the whole community* (pp. 33-58). Cambridge: Cambridge University Press.

Dansereau, D. (1992). *Savoir dire: Cours de phonétique et de prononciation.* Lexington, MA: DC Heath.

Dansereau, D. (1995). Phonetics in the beginning and intermediate oral proficiency-oriented French classroom. *French Review, 68,* 638-651.

Dickinson, B. (1999). Québec French: A Canadian response. *The Modern Language Journal, 83,* 413-416.

Eckert, P. (1989). *Jocks and burnouts: Social categories and identities in the high school.* New York: Teachers College Press.

Eckert, P. (1990). The whole woman: Sex and gender differences in variation. *Language Variation and Change, 1,* 45-67.

Eckert, P. (Ed.) (1991). *New ways of analyzing sound change.* New York: Academic Press.

Eckert, P. (1997). Age as a sociolinguistic variable. In F. Coulmas (Ed.), *The handbook of sociolinguistics.* Oxford: Blackwell.

Elliott, R. A. (1995). Foreign language phonology: Field independence, attitude, and the success of formal instruction in Spanish pronunciation. *Modern Language Journal, 79,* 530-542.

Ehrman, M. (1992). Female and male usage of pragmatic expressions in same-sex and mixed-sex interaction. *Language Variation and Change, 3,* 217-234.

Finegan, E. (1987). On the linguistic forms of prestige: Snobs and slobs using English. In P. Boardman (Ed.), *The legacy of language: A tribute to Charlton Laird* (pp. 141-161). Reno, NV: University of Nevada Press.

Fromkin, V. (Ed.). (1980). *Errors in linguistic performance: Slips of the tongue, ear, pen, and hand.* New York: Academic Press.

Gass, S., & Selinker, L. (1994). *Second language acquisition: An introductory course.* Mahwah, NJ: Lawrence Erlbaum Associates.

Geertz, C. (1983). *Local knowledge: Further essays in interpretive anthropology.* New York: Basic Books.

Graddol, D., & Swann, J. (1989). *Gender voices.* Oxford: Basil Blackwell.

Green, P. S., & Hecht, K. (1993). Pupil self-correction in oral communication in English as a foreign language. *System, 21,* 151-163.

Hadley, A. O. (1993). *Teaching language in context* (2nd ed.). Boston: Heinle & Heinle.

Hardy, J. E. (1993). Phonological learning and retention in second language acquisition. In F. R. Eckman (Ed.), *Confluences: Linguistics, L2 acquisition, and speech pathology* (pp. 235-247). Amsterdam: J. Benjamins.

Holmes, J. (1992). *An introduction to sociolinguistics.* London: Longman.

Horwitz, E., & Young, D. (1991). *Language anxiety: From theory and research to classroom implications.* Englewood Cliffs, NJ: Prentice-Hall.

Hudson, R. A. (1996). *Sociolinguistics* (2nd ed.). Cambridge: Cambridge University Press.

Ioup, G., & Weinberger, S. (1987). *Interlanguage phonology: The acquisition of a second language sound system.* New York: Newbury House.

Kasper, G. (1985). Repair in foreign language teaching. *Studies in Second Language Acquisition, 7,* 200-215.

Kent, T. (1983). *Paralogic rhetoric: A theory of communicative interaction.* London: Associated University Presses.

Kormos, J. (1999). Monitoring and self-repair in L2. *Language Learning, 49,* 303-342.

Labov, W. (1972). *Sociolinguistic patterns.* Philadelphia: University of Pennsylvania Press.

Labov, W. (1991). The interaction of sex and social class in the course of linguistic change. *Language Variation and Change, 2,* 205-254.

Lambert, W. E. (1967). A social psychology of bilingualism. *Journal of Social Issues, 23,* 91-109.

Lambert, W. E., & Tucker, G. E. (1976). *Tu, vous, usted: A social-psychological study of address patterns.* Rowley, MA: Newbury House.

Lefkowitz, N., & Hedgcock, J. (1999, March). *Sounding off: What FL learners say about social prestige, peer and teacher (dis)approval, and their oral performance.* Paper presented at the Annual Meeting of the American Association for Applied Linguistics, Stamford, CT.

Lefkowitz, N., & Hedgcock, J. (forthcoming). *When sounding bad is good: Covert prestige in the FL classroom.* Manuscript submitted for publication.

Lennon, P. (1994). Self-correction and error in advanced learner spoken narrative. In G. Bartelt (Ed.), *The dynamics of language processes: Essays in honor of Hans W. Kechert.* Tübingen: Günter Narr Verlag.

Léon, P. (1966). *Prononciation du français standard.* Paris: Didier.

Levelt, W. J. M. (1983). Monitoring and self-repair in speech. *Cognition, 33,* 41-103.

Lin, Y-H., & Hedgcock, J. (1996). Feedback incorporation among high-proficiency and low-proficiency Chinese-speaking learners of Spanish. *Language Learning, 46,* 567-611.

Lippi-Green, R. (1997). *English with an accent: Language, ideology, and discrimination in the United States.* London: Routledge.

Long, M. (1990). Maturational constraints on language development. *Studies in Second Language Acquisition, 12,* 251-286.

MacIntyre, P. D., Clément, R., Dörnyei, Z., & Noels, K. (1998). Conceptualizing willingness to communicate in a L2: A situational model of L2 confidence and affiliation. *The Modern Language Journal, 82,* 545-562.

MacKay, G. D. (1992). Awareness and error detection: New theories and research paradigms. *Consciousness and Cognition, 1,* 199-225.

McCandless, P., & Winitz, H. (1986). Test of pronunciation following one year of comprehension instruction in college: German. *The Modern Language Journal, 70,* 355-362.

McCroskey, J. C., & Richmond, V. P. (1991). Willingness to communicate: A cognitive view. In M. Booth-Butterfield (Ed.), *Communication, cognition,*

and anxiety (pp. 19-37). Newbury Park, CA: Sage.
McKay, S., & Hornberger, N. (Eds.). (1996). *Sociolinguistics and language teaching.* Cambridge: Cambridge University Press.
Milroy, J. (1995). Mechanisms of change in urban dialects: The role of class, social network, gender. *International Review of Applied Linguistics, 3,* 57-77.
Musumeci, D. (1997). *Breaking tradition: An exploration of the historical relationship between theory and practice in second language teaching.* New York: McGraw-Hill.
Nadasdy, A. (1995). Phonetics, phonology, and applied linguistics. *Annual Review of Applied Linguistics, 15,* 63-80.
Neufeld, G. (1978). On the acquisition of prosodic and articulatory features in adult language learning. *Canadian Modern Language Review, 34,* 163-174.
Neufeld, G., & Schneiderman, E. (1980). Prosodic and articulatory features in adult language learning. In R. C. Scarcella & S. D. Krashen (Eds.), *Research in second language acquisition* (pp. 105-109). Rowley, MA: Newbury House.
Oller, J. W. (Ed.). (1993). *Methods that work: Ideas for literacy and language teachers* (2nd ed.). Boston: Heinle & Heinle.
Peirce, B. N. (1995). Social identity, investment, and language learning. *TESOL Quarterly, 29,* 9-31.
Pennington, M. C. (1994). Recent research in L2 phonology: Implications for practice. In J. Morley (Ed.), *Pronunciation pedagogy and theory: New views, new dimensions* (pp. 92-108). Alexandria, VA: TESOL.
Pennington, M. C., & Richards, J. (1986). Pronunciation revisited. *TESOL Quarterly, 20,* 207-225.
Petyt, K. M. (1980). *The study of dialect: An introduction to dialectology.* London: André Deutsch.
Prator, C. (1991). Cornerstones of method and names for the profession. In M. Celce-Murcia (Ed.), *Teaching English as a second or foreign language* (2nd ed., pp. 11-22). New York: Newbury House.
Preston, D. (1989a). *Perceptual dialectology.* Dordrecht, The Netherlands: Foris.
Preston, D. (1989b). *Sociolinguistics and second language acquisition.* Oxford: Basil Blackwell.
Rampton, B. (1996). Youth, race, and resistance: A sociolinguistic perspective. *Linguistics and Education, 8,* 159-173.
Rivers, W. (1981). *Teaching foreign language skills* (2nd ed.). Chicago: University of Chicago Press.
Rivers, W. (Ed.). (1987). *Interactive language teaching.* New York: Cambridge University Press.
Rivers, W. (1989). *Teaching French: A practical guide.* Chicago: NTC Publishing Group.
Robinson, P. (1995). Attention, memory, and the 'noticing' hypothesis. *Language Learning, 45,* 283-331.
Salaberry, M. R., & Lopez-Ortega, N. (1998). Accurate L2 production across

language tasks: Focus on form, focus on meaning, and communicative control. *The Modern Language Journal, 82,* 514-532.
Sanders, C. (Ed.). (1993). *French today: Language in its social context.* Cambridge: Cambridge University Press.
Savignon, S. (1997). *Communicative competence: Theory and classroom practice* (2nd ed.). New York: McGraw-Hill.
Saville-Troike, M. (1989). *The ethnography of communication: An introduction.* New York: Basil Blackwell.
Scherer, K. R., & Giles, H. (Ed.). (1979). *Social markers in speech.* Cambridge: Cambridge University Press.
Schmidt, R. (1993). Awareness and second language acquisition. *Annual Review of Applied Linguistics, 13,* 206-226.
Schumann, J. (1976). Social distance as a factor in second language acquisition. *Language Learning, 26,* 135-143.
Schumann, J. (1978). The acculturation model for second-language acquisition. In R. C. Gringas (Ed.), *Second language acquisition and foreign language teaching* (pp. 27-50). Washington: Center for Applied Linguistics.
Seliger, H., & Shohamy, E. (1989). *Second language research methods.* Oxford: Oxford University Press.
Selinker, L. (1992). *Rediscovering interlanguage.* London: Longman.
Sisón, M. P. A. (1991). The relationship of college student attitudes, motivation, and anxiety to second language achievement: A test of Gardner's model (Doctoral dissertation, University of Southern California).
Suter, R. W. (1976). Predictors of pronunciation accuracy in second language learning. *Language Learning, 26,* 233-253.
Tarone, E. (1978). The phonology of interlanguage. In J. C. Richards (Ed.), *Understanding second and foreign language learning: Issues and approaches* (pp. 15-33). Rowley, MA: Newbury House.
Tarone, E. (1980). Communication strategies, foreigner talk, and repair in interlanguage. *Language Learning, 30,* 417-431.
Tarone, E., & Swain, M. (1995). A sociolinguistic perspective on second language use in immersion classrooms. *The Modern Language Journal, 79,* 166-178.
Thomas, G. (1991). *Linguistic purism.* London: Longman.
Trudgill, P. (1972). Sex, covert prestige, and linguistic change in the urban British English of Norwich. *Language in Society, 1,* 175-195.
Trudgill, P. (1996). *Sociolinguistics: An introduction to language and society* (Rev. ed.). New York: Penguin.
Valdman, A. (1976). Variation linguistique et norme pédagogique dans l'enseignement du français langue étrangère. *Bulletin de la Fédération Internationale des Professeurs de Français, 12-13,* 52-64.
Valdman, A. (1993). *Bien entendu: Introduction à la prononciation française.* Englewood Cliffs, NJ: Prentice-Hall.
Vigner, G. (1978). *Savoir-vivre en France.* Paris: Hachette.
Wardhaugh, R. (1998). *An introduction to sociolinguistics* (3rd ed.). New York: Blackwell.

White, R. (1997). Back channeling, repair, pausing, and private speech. *Applied Linguistics, 18,* 314-344.
Williams, G. (1992). *Sociolinguistics: A sociological critique*. London: Routledge.

Authors

JOHN HEDGCOCK, Associate Professor, TESOL/TFL, Graduate School of Language and Educational Linguistics, Monterey Institute of International Studies, 425 Van Buren St., Monterey, CA, 93940. Email: *jhedgcoc@miis.edu*. Specializations: linguistics, ESL writing, methodology, teacher education.

NATALIE LEFKOWITZ, Associate Professor, Department of Foreign Languages, Central Washington University, Ellensburg, WA, 98926-7552. Email: *nataliel@cwu.edu*. Specializations: foreign language methodology, sociolinguistics, gender studies, second language acquisition.

Applied Language Learning
2000, Vol. 11, No. 1, pp. 99-122

A Teacher's Investigation of Her Own Teaching*

Ayça Dutertre
Middle East School I

The steps and findings of a mini-action research study conducted by a DLIFLC language teacher are reported. The study focused on how this teacher varied classroom activities. The participants were U.S. military personnel studying Turkish at the advanced beginner level. Data were collected and analyzed at four different intervals over a six-week period. Videotaped recordings, students' needs and learning preferences, feedback from three observers, and the teacher's reflections were incorporated in the interpretation of data. The results of the study are examined and lesson plans are attached.

In her recent discussion of the last two decades of classroom research, Bailey (1999) uses a metaphor to capture the state of action research in the United States. She refers to action research as "the road less traveled," conveying its state as less well known than the other two kinds of empirical research, experimental research and naturalistic inquiry. While there is an array of books and articles emphasizing the benefits and value of the third kind of empirical research, action research, the actual studies from language classrooms are few in number. Perhaps the reason for this is that action research is the only type of empirical research carried out by the teacher rather than by an outside researcher documenting what goes on in language classrooms and that, generally, full time language teachers may not have the time to do research because of their heavy work load. In their book *Pursuing Professional Development: The Self as Source*; Bailey, Curtis and Nunan (in press) offer a comprehensive list of reasons derived from real life examples. Some teachers may feel that they are not given time or recognition; sometimes the school's administration may interfere; at other times the political context of teachers' work may prevent them from doing action research, or they may simply lack the skills and knowledge to carry out a research project. Another possibility may be that teachers may not be fully aware of the benefits of action research.

**A seminar presented at the Faculty Professional Development Day sponsored by the Academic Advisory Council (AAC) of the Defense Language Institute Foreign Language Center (DLIFLC) on May 28, 1999.*

For teachers, the most useful and relevant benefit of action research is that it helps them solve a real problem when it arises in the context of the classroom, systematically changing the phenomenon under investigation, bringing about improvement, and increasing their understanding (Burns, 1998; Chamot, 1995; Kemmis & McTaggart, 1988; Nunan, 1992; Wallace, 1998).

In conducting action research, the teacher collects objective data, for example, by videotaping the class, thinks about the problem, makes a plan to resolve it, carries out the plan while observing him/herself, looks at the collected data, and then starts over again. Therefore, action research is ongoing, consisting of several small investigations. The cycle continues until the problem is solved. The validity of action research increases when it is collaborative, involving colleagues and outside researchers in the investigation. For some scholars, involvement of others in the research cycle is a requirement (Kemmis & McTaggart, 1988). For others, such as Nunan (1992), collaboration should not be a defining characteristic, because while it is highly desirable, it may not be practical. Many teachers are either unable, for practical reasons, or unwilling, for personal reasons, to do collaborative research.

During the reflective phase of action research, the teacher reflects on the problem and interprets the objective data. In their book *Reflective Teaching in Language Classrooms*, Richards and Lockhard (1994) provide guidance and encourage teachers to teach reflectively, exchanging ideas and solutions with one another, even without having to go through all the steps of formal action research. For example, they consider an investigation done for the purpose of enhancing understanding, an action research project even if it is not done for the purpose of solving a problem. In addition to many practical ideas for action research, they also provide seven examples of action research case studies involving "negotiating course content with learners" (pp. 91-92), "renegotiating teacher-learner roles to increase student motivation" (pp. 110-112), "transitions during lessons" (pp. 126-128), "grouping arrangements in the classroom" (pp. 157-158), "student performance on learning activities" (pp. 178-180), "error correction" (pp. 200-201), and "learner strategies" (pp. 69-71). The project on "learner strategies" includes the investigations of two English teachers from Australia who were interested in discovering more about learning strategies used by their learners, and how they were responding to their teaching. This investigation increased these teachers' understanding by making explicit some things they knew intuitively. They also learned to facilitate their students' learning more effectively (adapted from Zornada & Bojanic, 1988, cited in Richards and Lockhard, 1994, pp. 69-71).

Another source that provides examples is Freeman's (1998) book *Doing Teacher Research: From Inquiry to Understanding*. This book includes five selected reports from the Languages In-Service Project for Teachers in Australia (pp. 224-253). One of these action research reports was written by a high school Indonesian teacher who wanted to increase the use of Indonesian in her classes. In an attempt to encourage her students to speak Indonesian more often and to use it for more than just classroom tasks, she investigated her teaching by taping her classes. She found that by using Indonesian for routine

classroom expressions she was able to increase its use in her class. While the use of English in the first taped lesson was 80%, it went down to 58% in the second taped lesson. Both her and her students' use of the target language was increased. By doing this investigation, the teacher heightened the awareness of her students' enthusiasm for using the target language in their everyday communication, and also improved the cooperative learning atmosphere in her class.

Among the few published studies, one titled "Valuing Diversity: Action Researching Disparate Learner Groups" investigated teaching diverse student classes that emerged during the Australian Adult Migrant Education program (Burns, 1997). In this national action-research project that involved 28 English as a second language (ESL) teachers, they found that over time a noticeable shift occurred from a deficit concept of diverse learner groups to one that saw them as challenging and offering multiple resources for both teachers and learners. Many teachers abandoned the idea of perceiving their students as problematic and difficult to teach and realized that achieving neat and homogeneous classroom subgroups is not necessary to treat the students more holistically. Teachers began to view themselves as creative decision makers who could confidently match their skills and teaching techniques to the needs of their students. Participation in this action research project led some teachers to continue their own professional growth.

In another action-research study titled "Spoken Discourse and Power", three groups of ESL teachers in Australia analyzed spoken texts to improve the utility of ESL materials in their teaching of spoken language. Their findings suggested that these teachers could assist students in new ways by making cultural presuppositions of discourse explicit, thereby improving their teaching practice (Burns, 1992-1993).

Mok (1997) conducted an action research project on student empowerment in a secondary school English language program in Hong Kong. The researcher was reassured that the more power students are given to decide what and how to learn, the harder they will work, the stronger their motivation will be, and the more they will gain in their learning. In her student empowerment efforts, she realized that students were empowered through involvement, partnership and action research, and concluded that for students to attain quality learning, the school authority should handle power sharing carefully with students in mind.

Kebir's (1994) students discovered that communication was more important than linguistic accuracy through an action research study of communication strategies of adult language learners in Australia. The researcher gained greater awareness of what it means to be communicatively competent, while learners increased their ability to communicate in difficult speech situations.

In the field of language education, the number of advocates for action-research is increasing significantly. There are even some teacher educators who argue that research generated from classroom settings should help shape both classroom practices and second language acquisition (SLA) theories.

For example, in a recent article Zephir (2000) asserts that since in action research teachers are directly involved in the data collection process, this option should be used for obtaining both the qualitative and quantitative information needed to make any kind of foreign language education model useful. There is also an increasing number of language teacher educators who use action research in their teacher training programs, either by having teacher trainees get involved in action research or by personally participating in action research projects. Examples of such work include teacher's professional development in Spain (Ruiz de Gauna, Díaz, Gonzalez, and Garaizar, 1995) and van Lier's (1992) action research project in California.

In a Masters of Arts English teacher education program in the People's Republic of China, action research was incorporated in the curriculum. During the process of this introduction teacher trainers collected data in a variety of ways, such as audio and videotapes, case studies, teacher and learner diaries, questionnaires, interviewing, and classroom observations. These teacher trainers found that action research increased awareness of the teaching and learning process, improved classroom research skills, and led to more variety in classroom activities. The researchers argued that action research is a useful method for helping to educate English teachers in China (Thorne & Qiang, 1996).

Research Question

Nunan (1990) also notes that action research is a very useful tool in a teacher's classroom practice. Nunan (1992, p. 229) describes action research as "a form of self-reflective inquiry carried out by practitioners, aimed at solving problems, improving practice, or enhancing understanding." Although my report is not intended to be formal classroom research, it addresses the three purposes that define action research.

Through observing other teachers and self-observation, I developed my research question. To serve the purposes noted above, I first observed language classrooms of other teachers in a variety of settings, including adult education and college- and elementary-level classes. During my observations, I was inspired by a teacher who was teaching French as a foreign language to elementary school children. Clearly, the French teacher's approach was totally appropriate for the age group of her students. She changed her activities frequently, and each student was completely engaged in the activities, which included games, songs, and drama with costumes and props. The high level of energy in the classroom was created by this teacher through engaging ways to practice what had been learned. This was not a typical language classroom. Throughout the class, students never sat at their desks. Instead, they moved around changing or rearranging the space each time the activity was changed. Certainly, the physical layout of the classroom had an effect on how this teacher guided the children to use the space available to perform all the movement patterns that took place. I was impressed by the way this teacher varied activities, all of which involved a lot of movement, to keep the attention

of six- or seven-year-old children, who typically have very short attention spans.

This particular observation was significant in the sense that it made me think about my own teaching to adults, most of whom are members of the US military. This highly intensive language program involves six to seven hours of instruction a day, five days per week, for 47 weeks. One of my greatest challenges as a teacher is keeping my students' attention. Observing the French teacher in her learner-centered class made me think about my own classroom activities, and I asked myself the question, "*How do I vary my current classroom activities to motivate and interest the adult military personnel whom I am teaching*?"

After I formulated the question, I chose a specific aspect of the curriculum—reporting and speaking about current events—as the focus for my investigation. I made this choice based on the students' needs and the new curriculum phase, which had started just before the end of the first semester in the 47-week Turkish Basic Course. The Turkish program is divided into three semesters: beginning, intermediate, and advanced. The first semester ends at the end of the thirteenth week. Students are expected to have survival language skills (Level 1 of the Interagency Language Roundtable [ILR] skill level descriptions) at this time. Then a transition is made into the second semester, where the goal is to provide students with an abundance of authentic materials promoting a mastery of language described as intermediate (Level 2 of the ILR skill level descriptions).

Preparing students to listen to, understand, and speak about current events is a primary objective of the program. This aspect of the curriculum necessitates early exposure to news items. Near the end of the first semester, during the tenth week, I incorporated a speaking hour related to headline news. Students were eager to discuss current events even if they had minimal language skills. Since this aspect of the curriculum is important, in terms of the institution's goals and in terms of the students' interests, I decided to investigate the speaking hour during which headline news is discussed. This class was scheduled as the first class hour each day, from 7:45 to 8:45 a.m.

Participants

The participants were five U.S. military personnel at the advanced beginner level.

Design and Method of Data Collection

I collected the data on four different occasions over a six-week period. The final three of four occasions were videotaped, and oral and written feedback were obtained on each occasion from different independent classroom observers. There was one observer for each data collection. My observer for the second data collection was a colleague who was an ESL teacher doing classroom observations as part of her graduate training, for the third data

collection a teacher trainer and coordinator of graduate level practicum classes at a university, and for the fourth and last data collection a university researcher and professor in a Masters of Arts program in Teaching English as a Second Language (TESOL) and Teaching Foreign Languages (TFL).

The first data collection took place during the twelfth week of instruction. At this initial stage of the investigation, the data collected consisted solely of teacher's and students' introspective observations and reflections. After this preliminary cycle, I completed the second, third and fourth cycles of the investigation with objectively collected data (videotape recordings). The second data collection took place during the fourteenth week of instruction. The third data collection took place during the fifteenth week, and the fourth in the seventeenth week of instruction.

Following each of these three data collections, I discussed alternatives with the observer who focused on the topic of investigation: how I varied my activities for the speaking hour. Were they varied sufficiently to involve each student fully? Next, I reviewed and analyzed the videotape very carefully, reflected on what happened, and collected input from the students. Finally, I incorporated change before the next data collection—the next cycle of the study. This way, feedback from the students and the three different observers, plus the descriptions from the videotaped classes, were all considered in the analyses and interpretation of the findings, thereby enhancing the validity of this narrowly focused study.

Each analysis led to incremental changes from session to session. My project evolved, bringing about new goals, and I began a new cycle to address the new goals. For example, I accommodated each student's needs and learning preferences as they became more obvious. Six weeks after the start of the investigation, the session during which the last piece of data was collected was radically different from the first. My role as teacher changed from being an error corrector in front of the classroom to being a facilitator attending to each individual learner's immediate needs.

Table 1 illustrates the steps I took for each cycle, after each of the last three data collections. The project evolved in an ongoing cycle in which I thought about the problems, made a plan to resolve it, carried out the plan while observing myself, looked at the outcome (videotape recordings and observers' feedback), checked students' reactions, then started over again. Figure 1 illustrates the ongoing characteristics of the investigation.

Table 1. Steps in the Investigation

Item	*Step*	*Teacher's Actions*
1	Planning	Planned Lesson
2	Action and data collection	Videotaped my classes
3	Self-observation	Reviewed and analyzed the videotape recording carefully
4	Observation	Received feedback from the observer who focused on the topic of investigation, and discussed alternatives with the observer.
5	Reflection	Reflected on the findings with the students
6	Action	Applied a change before the next data collection (next cycle)
7	Planning	Replanned the lesson
8	Action	Applied a change before the next data collection (next cycle)

First Cycle

As mentioned above, during this initial stage of the investigation, the first data collection consisted of teacher self-observation and joint reflection with the students. The reason for starting this way was because the speaking hour concerning the headline news was a new aspect of the curriculum and I usually prefer working with the students in planning lessons and formulating short-term objectives. For this reason, during the first data collection, there was no established lesson plan. At this point of the investigation I did not think that it was necessary to videotape a class for which there was no lesson plan.

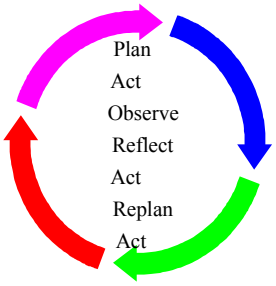


Figure 1. Ongoing Cycle

During the tenth week students started bringing in headlines in their native language which they found in a variety of sources such as the Internet, newspapers, and TV broadcasts. Each student summarized one headline of their choice in the target language in their own words. This was their homework. I did not intend this exercise to be a translation exercise. The purpose of this exercise was to give students opportunities to convey the meaning of current events in their own words. Any news item, including one that they might have heard on TV the night before, could serve our purpose of conveying meaning. I told my students that these summaries could be short, but the students were to convey enough information to clearly describe the event that took place, the conditions surrounding the event, and the outcome.

Description of the Class

At the start of the class, the students would write their headlines in the target language on the board. Then each one in turn would introduce the headline in Turkish to the entire class with the key vocabulary in context. During and after these introductions, I would correct errors in grammar or vocabulary usage. Students asked questions or answered my questions on each news item. Then we moved to another news item, brought by another student. By the end of each class we were able to cover each news item and expand each one as a whole class activity, but students had no time to discuss them in groups or pairs.

Initial Plan and Action

Since I wanted to give students more opportunities to use the language, I told the students not to bring any new headlines for the next day. Instead, they would discuss the first session's items doing pair work. I thought this way, students' speaking time would increase considerably. I also told them to compile these news items in their own folder. For each class, I assigned one student to provide me with a clean, corrected copy of each day's headlines to be compiled in my folder.

The following week they were tested on these headline news items. With the exception of one person who was unable to convey the meaning of the headlines, the students gave good summaries. After this test, which was administered during the twelfth week of instruction, I started my investigation involving objective data collection and one observer per session.

Teacher's Reflections

After this initial cycle, until the second cycle, each week's speaking hours proceeded in exactly the same way as the previous week's lessons. We were spending two class hours on the same news items. The problem was that I was dissatisfied with the way these hours were going, because I was a teacher in front of the class correcting errors and, introducing vocabulary or grammar. There was very little production on the part of the students when they first brought in their summaries. The entire class hour was taken up in the correction of students' errors and the introduction of new material. I wanted to do something to increase the students' talk during this speaking hour (see Second Cycle, pp. 107-109).

Students' Reflections

I decided to share my reflections with the students and get their reflections on the way the headline news items were being covered. In an open discussion each student stated his opinion as I took notes. Students felt they were memorizing headlines with little or no creation on their behalf; they were simply practicing already corrected language samples. Therefore, my initial plan and action of telling the students to bring news items every other day so they could discuss and expand each one in pairs or groups did not work.

Students perceived lack of context as a major problem. For example, one student reported about a landslide. The report did not make any sense to one of the students because it contained very little information. Lack of context for the information given made it difficult for the student to interpret. The student who had taken the news article from the Internet showed me the original copy in English. The article indicated that there had been a landslide in Turkey, but the exact location was not given. Another piece of information was that several military personnel who happened to be in the area were trapped there until help arrived. The student who had the greatest problem with this item could not associate the soldiers' presence with the natural disaster area. He said: "In order to make sense out of this news item, I need to know what the soldiers were doing in the disaster area."

Second Cycle

Plan and Action

All points made by the students led me to implement a major change in the conduct of these headline news speaking sessions. In order to increase the amount of student talk, I wanted to eliminate each problem mentioned above. That is, instead of doing pair work every other day after the corrections,

I wanted to have my students talk about and discuss the news every day. Students agreed with me.

To solve the problem of lack of context, I first assigned a single headline news item for the entire class. I told them to look in newspapers and watch CNN Headline News for the presidential elections. I then prepared a detailed lesson plan with consideration of all the problems. The second data collection reflected all the changes that I implemented. I also invited my colleague, the ESL teacher, to observe the class. I asked her to focus on how I varied my activities during this hour. The entire class hour was videotaped.

The second data collection was taken during the fourteenth week of instruction. By this time I had developed a lesson plan (see Appendix, Lesson Plan 1).

Description of the Class

The class started with a five-minute brainstorming activity on the previously assigned topic of discussion, forest fires in California, one in Big Sur, the other in southern California. In case some students had not brought any information about this news item, I brought in copies of the local newspaper, which contained the assigned headline and pictures.

I then divided the students into two groups. One group of three students was to discuss the fire in Big Sur, and the second group of two students was to discuss and report on the fires in the Malibu area. I gave each group a copy of the local newspaper so the students could supplement their information with information from the front page of the paper. As the students worked together to construct the message in Turkish, I moved around and attended to their conversations. In the meantime, I corrected their language on small pieces of paper and passed these to the students without interrupting their conversation. The only times that I talked were to respond to three questions directed at me by different members of the two groups. Both my self-observations and the observer's feedback revealed the following: The students appeared to be totally involved in their tasks.

Seven minutes later, I asked if they were ready to report the news. Each student had something different to say about the fire, and the entire class listened to this preliminary reporting very attentively. This activity took three minutes. I next asked the groups to write their reports on the board. The writing activity was another task given to them prior to the group discussion. Each group wrote the paragraph they had created after their group discussion. Each group then took turns answering the other group's questions about the fire. I played only a minor role in this entire activity. By the time the second group had finished explaining and answering the questions, another 23 minutes of the class time had passed.

I then took two minutes to assign the next day's news item. Every student in the class was to prepare from authentic sources a brief history of the O.J. Simpson case and the latest developments in the case. Next, I asked them to name the previous headline-news items that had been discussed in the class. I wrote each item on the board as the students named them. This took up

about one minute. After this activity, I rearranged the students into new groups and asked them to review the discussions of past news items. This activity took about ten minutes. Two minutes before the end of the class we played the hangman game as a wind-down to end the class in a fun activity (see Appendix, Lesson Plan 1).

Observer's Feedback

My observer did not have any comments on how to improve or increase the number of activities. Her written feedback indicated no need for change in the focused area.

Teacher's Reflections

From my own point of view, the changes implemented after the first data collection considerably increased the amount of student talk in the classroom; the activities were more appropriate for a class whose purpose was to promote speaking. Most importantly, my role as a teacher changed significantly. I was happy with my new role as a facilitator of communication among students. Since the students themselves were discussing and negotiating the meaning of a message coming from a context familiar to all of them, they required little or no feedback from me to synthesize the written form of the report which they put on the board. I was happy with the outcome of the class.

Students' Reflections

Students said they were pleased with the way the class went. It was evident from the videotape recording that students enjoyed these activities; they appeared to be totally involved.

Other Feedback

For this particular data collection I received additional feedback from several of my colleagues who were not involved in this investigation. I showed them segments from the videotaped class. They approved of the way the class was conducted. They could suggest no further changes at this point in the investigation.

Third Cycle

Plan and Action

One problem was lack of sufficient time between the second data collection and the third, which might have revealed some need for a change. The date of the third data collection had been prearranged with the observer, and could not be postponed to accommodate her. For this reason no changes were made in the lesson plan. The third data collection was in the fifteenth week of instruction (see Appendix, Lesson Plan 2).

Description of the Class

At the start of the lesson, the next day's homework was assigned. Every student in the class was to find out about the TWA plane crash (the latest state of the investigation.) Next, a brief brainstorming activity was done to set the stage for the day's news item, which was a brief history of the O.J. Simpson case and the latest developments collected from authentic sources. In case students failed to find any information about this news item, I again brought in copies of the local newspaper which contained the assigned headline and pictures on the front page and showed them a video recording of the CNN Headline News about the Simpson case. For this topic, the group discussions, writing activities, presentations, and discussions took longer. Therefore, we had to skip the review of the previous topic. We ended the class with another game.

Observer's Feedback

In the post-observation discussion, my observer and I both felt that it was not a loss not to be able to do everything I had originally laid out in the lesson plan. It is better to have more class activities than to run out of them. With regard to variety, we both felt there were enough different tasks to sustain student interest and participation throughout the entire class.

Students' Reflections

Two issues were raised during the reflections with the students. The first issue was that the news items I assigned were not always interesting. For example, the news about O.J. Simpson bothered almost all the students in the class. They told me that they were all fed up with this case and that listening to and talking about the case was something they avoided even in their native language. Discretion must be used in selecting materials for practice. Sensitivity may be something that blocks learning.

The second issue concerned only one student. This student told me that there was no benefit for him in group discussions and that it would be better if everybody in class worked with a news article individually, writing and presenting his or her own version. He said this would lead to several different versions of the same news item, since this was the emphasis during the time the previous headline news stories were being reviewed in class. To avoid memorization of a collectively created version of a news article, I told them to convey the message in their own words, as opposed to repeating what had been compiled in their "headline news folders."

Plan and Action

To tackle the first problem (unwanted or uninteresting topics), I told my students that they would choose news items of their own preference. We decided collectively that each student would take turns selecting news items for each class. Therefore, for the succeeding classes, students who were to choose a news article from an authentic source were to prepare a list of key

vocabulary, present the material to me for approval, and then make copies to be used during the next day's speaking hour.

To deal with the second problem, I asked the student opposed to group discussions to be the leader (the teacher) for the next day's class and conduct the class the way he would like to learn. Having assumed the role of teacher, he brought in a newspaper article and distributed copies to his classmates. Skipping the group discussion stage, he told each student to write a Turkish summary of the news article. By the time everybody had finished their paragraphs there were fewer than five minutes of class time left for presentations and follow-up questions by the entire class. This happened because some students did not work as fast as others. Students who finished early had to wait for others before they could all present their own versions for class discussion. The entire hour passed without any speaking.

Teacher's and Students' Reflections

After giving one student the opportunity to lead the class this way, I conducted a session as a whole class to discuss and reflect on how each person felt about the way this hour passed. It turned out that the student who raised this issue was the only student who did not want to construct the Turkish version of the news article in a group by way of negotiating the meaning. Everybody else was very eager to continue the activity, since it gave them more opportunities to speak.

Other Feedback and Action

At this point in the investigation, before I had made a definite decision about the student who wanted to work individually, I discussed this matter with several colleagues (several ESL teachers and some teachers of other languages) to get additional feedback. The result was that I told the student that I would accommodate him if he preferred to stay out of the group discussions in class.

From that day on, the headline news speaking hour took on a new shape. The selected material was brought in with a glossary containing key words. The student who did not want to participate in the initial group conversation to construct the written version (with another classmate) worked alone with some feedback from me. Over time, the case of this student turned out fine. He was able to improve his speaking skills. Eventually, he graduated achieving the institute's objectives. However, I should also note that he ended up joining his classmates during the subsequent classes. There were instances in the video recordings showing this student asking questions or voluntarily getting involved in one of the group discussions with his classmates while I was attending to another group. Nevertheless, after I had implemented these changes, I videotaped a fourth class during the seventeenth week of instruction as the last piece of data collection. The observer on this occasion was a university researcher and professor.

Fourth Cycle

Plan and Action

The fourth and final data collection took place in the seventeenth week of instruction. This class involved two news articles brought in by one student. Since I had examined them prior to the class, I knew the content, but the rest of the students did not. I was no longer assigning students to find information on a widely talked about news topic (see Appendix, Lesson Plan 3). Instead of telling students what piece of news to work on, I simply checked to see if news articles selected by students were appropriate and furnished with an accurate glossary one day before the class.

Description of the Class

During this hour, we had two news articles, each reporting a different earthquake. One was in the Yellow Sea and the other was in Peru. Students first worked on the Yellow Sea earthquake in pairs (with the exception of the aforementioned student, who worked on his own). After the discussion and the writing activity, each pair wrote their report on the board and presented it. Following the entire class discussion for each of the three Turkish summaries (one from each of the two pairs, and one from the student who worked alone), they repeated the process for the second earthquake in Peru. The end of the class coincided with the end of the second topic's activities.

Teacher's and Students' Reflections

My reflections, the students' feelings, and the observer's comments on how this hour went were all positive. No further changes needed to be implemented to ensure a sufficient variety of classroom activities. I have made considerable changes since beginning this investigation, yet I was interested in finding more ways to vary classroom activities to prevent classroom boredom. I asked my observer for further suggestions.

Observer's Feedback

My observer gave me an excellent suggestion for an activity to be used while the previous news items were being reviewed. This activity, adapted from the Counseling-Learning Method, is called the "human computer" activity (Richards & Rodgers, 1986). For this activity, the entire class sits in a circle with a tape recorder. Students take turns as they wish to speak on a given topic. When a student says something, the teacher repeats it correctly. The student can have the teacher repeat the message as many times as he wants. Since the students have this control, the teacher acts as a human computer. After the teacher, the student repeats the message again while this correct version is recorded on tape. This repetition, unlike the mechanical drills of the audio-lingual method, encourages students to pay attention to correct and appropriate language samples originally created by themselves but revised by the teacher. The activity also prompts students to create hypotheses and make necessary adjustments in their own language. By the end of the activity the recorded cassette consists of students' voices talking about the topic that was discussed.

Action

After the fourth and final data collection, I used the human-computer activity several times during a review of previously discussed headline-news items. Students loved this way of practicing and reviewing old material before they were tested again on the headline news. This activity increased their confidence and fluency in speaking. All students did very well on the headline news part of their speaking tests. Moreover, the fact that we listened to a tape consisting of students' own voices added the dimension of listening to our existing repertoire of activities.

Conclusions and Findings

In doing this study, as in all action-research studies cited in the introduction of this article, my major learning was that I (the teacher and the researcher) increased my awareness of action research and experienced its expected and unexpected benefits.

- In action research, the research question is derived from a real problem (Kemmis & McTaggart, 1988). The question of my investigation evolved when I felt that my classroom activities were not varied sufficiently.
- Action research is ongoing (Nunan, 1992). The investigation had four cycles; each involved systematically changing some aspects of my own practice as the investigation evolved, bringing about new goals (such as accommodating learners' preferences) and solutions to those goals, thereby making the project take the form of an ongoing cycle.
- Action research is objective and, according to Kemmis and McTaggart (1988) should be, collaborative. Use of videotape recordings and outsiders' input (observers' written and verbal feedback) made the study objective and collaborative.
- Action researchers share the result of their investigations with colleagues (Wallace, 1998). As indicated at the beginning of this article, I have already disseminated the results once at a professional conference. My hope is to reach a larger audience with this publication and the next presentation which is to take place at ACTFL 2000, in Boston. Wallace (1998) stresses the importance of dissemination of action-research studies, making professional development a major goal of action research. As we have seen in the study results of Thorne and Qiang (1996), action research can be a useful method to educate teachers.
- The results of this study brought about improvement and changed the phenomenon under investigation. As indicated in each cycle of this investigation, after each data collection, small changes were implemented in the way the headline news speaking classes were conducted. Teacher-fronted classes increasingly turned into learner-centered classes and cooperative learning environments with activities that took into account each student's learning preference.
- I enhanced my own understanding. The French teacher whose change of

activities created a high level of energy totally involving six- to seven-year old children was my original motivation for the investigation. Therefore, throughout this investigation, I focused only on how I varied activities. Were they varied to a sufficient degree that the objectives of the speaking class were accomplished, while keeping the attention of my students? The more I observed what happened during these classes (by reviewing the video recordings) and the more feedback I received from observers, the more I realized that many additional factors beyond variety in activities had had an impact on students' attention, and the more I enhanced my own understanding—another defining characteristic of action research (Nunan, 1992; Wallace, 1998).

- I appreciated the importance of an observation instrument used in the investigation. My realization of additional factors that arose throughout the investigation was mostly due to the approaches used in the observations. Particularly, the observation instrument used by one of the observers captured many important details I would have ignored if they had not been explained to me by the observer. My last observer, who is a university professor and researcher, used the instrument known as FOCUS (Fanselow, 1977). The power of this instrument amazed me because of the amount of detail my observer could provide after the class just by looking at his notes containing pages of codes and diagrams showing patterns of classroom interaction. For example, the same observer pointed out to me how my body language (dance-like movements) were giving feedback to one student who attempted to sound like a Turkish broadcaster by making a very long sentence.
- While analyzing the objective data in the videotape recordings, I incorporated Fanselow's (1987) five characteristics of classroom communication. Fanselow (1987) enumerated five characteristics of classroom communication that I find to be extremely useful in doing classroom observations. The first is the "source and target" of communication. He then subcategorized the "source and target" of communication as "the teacher", "one student", "a group of students", "the entire class", and "other" such as materials and realia. The second characteristic is the "study"—the subject being studied such as language, biology, etc. The third is the "medium" of communication such as linguistic-aural, linguistic-visual or paralinguistic—pictures, silent communication, etc. The fourth is the "content area." In this study headline news was the content area. The fifth characteristic of communication are the "moves." "Moves" involve "structuring" (e.g., error correction), "soliciting" (e.g., asking questions), "responding," or "reacting."
- Both written and oral feedback from the three observers and the videotape recordings of the classes clearly show all five characteristics of communication varying, with students having more control of their learning than teacher-fronted classes. For example, "source and target" of the communication was mostly among students in pairs or from individual students to the entire class. The use of authentic materials and the use of

the board were also varied, creating lively classroom dynamics with "content area" being a combination of "study language" and "study other" (Omaggio-Hadley, 1993.)

- I observed that when students are given control they use all five characteristics of communication on their own without much need for teacher intervention. For example, students were "soliciting" more than they do under teacher-fronted instruction; that is, they were eliciting more target language input from one another. Both the video recordings and observer feedback revealed that in these classes students were not only "soliciting;" they were also making many "structuring moves"—correcting one another's language, negotiating meaning, helping one other learn, or encouraging one other to take the floor. The observed variations in "moves" were possibly due to variations in the "mediums" with a great deal of linguistic-aural and linguistic-visual, all within the control of the students. Both my observers and the videotape recordings indicated that there were frequent instances of one student encouraging another to say more.
- Two of my observers reported that I communicated to my students by being silent or using body language to guide them. They pointed out that I used additional "mediums" such as paralinguistic mediums or silence to simply encourage the students to stay in control of the situation. For example, I was deliberate in allowing students to struggle to come up with a response on their own before I made it available for them. I found out that most of the time my students were quite capable of coming up with accurate language use without any verbal help from me.
- I have also increased my own appreciation of the power of "learner autonomy" (Wenden, 1991). Taking into account the observed patterns of the students' sense of ownership and their willingness to take control of learning, I feel I accomplished more than my goal of varying the activities with real world current events (Fanselow, 1980).
- Action research results cannot be generalized (Nunan, 1992; Wallace, 1998). It should also be noted that no claims are made that the improvement in my students' learning is a result of the changes that were applied in each cycle of this investigation. One can possibly infer a causal relationship. My findings and the changes that I applied based on these findings in each cycle pertain to the given teaching situation with a given group (not a representative sample) at a given time. Therefore, it would be wrong and extremely unwise to say that these interventions will work in every teaching situation (Nunan, 1992).

Encouraging teachers to observe their own behavior, reflect on what is happening in the classroom, and even become classroom researchers is not a novel idea in our field Nunan (1989). Countless benefits can emerge as a result of awareness gained by self-observation, description, reflection, and an exchange of ideas. The entire experience of doing action research really made me become more aware of my own behavior as a teacher. After this experience, it became habitual for me to pay deliberate attention to my behavior in the

classroom, reflect afterwards, and make small changes that usually make big differences and bring about positive outcomes.

This experience, as much additional work as it was for me, encouraged me to undertake more action research projects and to look for more action research studies related to language learning and teaching situations. Thus, I believe Bailey's (1999) depiction of action research as "the road less traveled" should really become "the road most traveled" if we teachers want to shape the future classroom.

References

Bailey, K. (1999). What have we learned in two decades of classroom research? Plenary presentation at the TESOL Convention, New York, NY.

Bailey, K., Curtis, A., & Nunan, D. (In press). *Pursuing professional development: The self as source*. Boston: Heinle & Heinle.

Burns, A. (1992-1993). Spoken discourse and power. *Prospect*, *8*(1-2), 61-76.

Burns, A. (1997). Valuing diversity: Action researching disparate learner groups. *TESOL Journal*, *7*(1), 6-10.

Burns, A. (1998). *Collaborative action research for English language teachers*. Cambridge: Cambridge University Press.

Chamot, A. U. (1995). The teacher's voice: Action research in your classroom. *ERIC/CLL News Bulletin, 19*(2), 1, 5-8.

Fanselow, J. (1977). Beyond rashomon: Conceptualizing and describing the teaching act. *TESOL Quarterly*, *11*(1), 17-39.

Fanselow, J. (1987). *Breaking rules: Generating and exploring alternatives in language teaching*. New York: Longman.

Fanselow, J. (1980). What kind of a flower is that? An alternative model for discussing lessons. In F. Jonathan. *Second language discourse: A textbook of current research*. New Jersey: Ablex Publishing Corporation.

Freeman, D. (1998). *Doing teacher research: From inquiry to understanding*. Boston: Heinle & Heinle.

Kebir, C. (1994). An action research look at the communication strategies of adult learners. *TESOL Journal, 4*(1): 28-31.

Kemmis, S., & McTaggart, R. (1988). *The action research planner*. Geelong, Australia: Deakin University Press.

Mok, A. (1997). Student empowerment in an English language enrichment program: An action research project in Hong Kong. *Educational Action Research, 5*(2), 305-320.

Nunan, D. (1989). *Understanding language classrooms*. New Jersey: Prenctice Hall.

Nunan, D. (1990). Action research in the language classroom. In J. C. Richards & D. Nunan (Eds.), *Second language teacher education*. Cambridge: Cambridge University Press.

Nunan, D. (1992). *Research methods in language learning.* Cambridge: Cambridge University Press.

Omaggio-Hadley, A. (1993). *Teaching language in context* (2nd ed.). Boston, MA: Heinle & Heinle.

Richards, J. C., & Lockhard, C. (Eds.). (1994*). Reflective teaching in language classrooms.* Cambridge Language Education Series. New York: Cambridge University Press.

Richards, J. C., & Rodgers, T. (1986). *Approaches and methods in language teaching: Description and analysis.* New York: Cambridge University Press.

Ruiz de Gauna, P., Díaz, C., Gonzalez, V., & Garaizar I., (1995). Teachers' professional development as a process of critical action research. *Educational Action Research, 3*(2), 183-194.

Thorne, C., & Qiang W. (1996). Action research in language teacher education. *ELT Journal*, *50*(3), 254-262.

Van Lier, L. (1992). Not the nine o'clock linguistics class: Investigating contingency grammar. *Language Awareness*, *1*(2), 91-108.

Wallace, M. (1998). *Action research for language teachers*. New York: Cambridge University Press.

Wenden, A. (1991). *Learner strategies for learner autonomy*. Englewood Cliffs, NJ: Prentice Hall.

Zephir, F. (2000). Focus on form and meaning: Perspectives of developing teachers and action-based research. *Foreign Language Annals, 33*(1), 19-30.

Zornada, I., & Bojanic, S. (1994). Strategies used by competent language learners. *Learners and language learning: Stage 1*. In J. C Richards & C. Lockhard (Eds.) *Reflective teaching in language classrooms* (pp. 69-71). Cambridge Language Education Series. New York: Cambridge University Press.

Appendix

Lessons Plans: Headline News (current events)
Class: 47-week Turkish Basic Course (TU 296)
Number of Students: 5
Level: Beginner Intermediate
Language: Target Only

Lesson Plan 1

Data Collection: 2nd
Date: 10/25/1996
Week of Instruction: 14

A. Set the Stage
1. Warm-up. Brainstorming. The teacher elicits what the students have found out about the California fires that have been going on for one week. (Finding the current information about the fires from TV news or the local papers was students' homework.) Individual students give their input. (2 minutes)

Back up/visual aid: The teacher shows the headlines from the local newspapers which contain the assigned headlines, and pictures on the front page.

B. Discussion of California Fires
Group discussions: The teacher assigns the Big Sur fire to one group or pair and gives them the newspaper that has the Big Sur fire on the front page. The teacher assigns the southern California fire to the other group and gives them another paper that has the information about the fires in southern California.
Task # 1: Oral discussion. Each group or pair shares the information brought about the California fires (if students forgot to bring information about the California fires, they use the newspaper to obtain the necessary information for their discussion).
Task # 2: Written summary. Each group summarizes all findings in one paragraph under a headline or a theme statement.

Teacher moves around, attending to both groups and giving them feedback.

C. Group Presentations on California Fires
Each group shares its information with the entire class:

1. One member from each group or pair goes to the board and writes the paragraph. The class takes notes.
2. Each group or pair presents their headline news to the entire class, and answers questions about the particular fire.
3. Teacher adds, responds to, explains as needed.

D. Assign Homework
Teacher assigns the homework for the next day's class. Find out about the O J Simpson case:
1. Give a brief history of the case.
2. Bring something new about the case.

E. Review Previous Headline News
Groups discuss and review the previous headline news that have been introduced to the class.

F. Play a Game
Wind-down: The teacher puts a previously discussed headline on the board with blanks: "T———'— T—— K——— ———."
The class plays hangman (or wheel of fortune) by calling out the missing letters or words.

Lesson Plan 2

Data Collection: 3rd
Date: 10/29/1996
Week of Instruction: 15

A. Assign Homework
Teacher assigns the homework for the next day's class. Find out about: TWA plane crash — latest state of investigation. {TWA ucak kazasi. Sorusturma nasil gidiyor? Son gelismeler neler?}.

B. Set the Stage
1. Warm-up. Brainstorming (vocabulary building). The teacher elicits a brief history of the O. J. Simpson case through questions.
2. Warm-up. Brainstorming. The teacher elicits what the students have found out about O. J. Simpson case. (Finding the current information about the case from TV news or the local papers was students' homework.) Individual students give their input.

Back up/visual aid: The teacher shows the headlines from the local newspapers which contain the assigned headlines and/or pictures and/or a segment of the TV news about the case.

C. Discussion of O. J. Simpson Case
Group discussions:
Task # 1: Oral discussion. Each group or pair shares the information brought about the O. J. Simpson case. First, they summarize the history of the case. Next, they discuss the most recent developments. (If Students forgot to bring new information about the case, they use the newspaper to obtain the necessary information for their discussion).
Task # 2: Written summary. Each group summarizes all findings in one paragraph under a headline or a theme statement.

Teacher moves around, attending to both groups and giving them feedback.

D. Group Presentations of O. J. Simpson Case
Each group shares the information with the entire class:
1. One member from each group or pair goes to the board and writes the paragraph that summarizes the case and gives new information about the case. The class takes notes.
2. Each group or pair presents their headline news to the entire class and answers questions about the history or recent developments of the case.
3. Teacher adds, responds to, explains as needed.

E. Review Previous Headline News
1. Groups discuss and review the previous headline news that have been introduced to the class.

2. Each group presents 2 to 4 headline news items to the entire class with appropriate factual questions.
The purpose of the review and questions is to encourage Students to vary their language each time they discuss a headline news story, rather than memorize the headlines.

F. Play a game
Wind-down: The teacher puts a previously discussed headline on the board with blanks: "K——'—i———o—n- %-.-'- ———" {Kaliforni'yada issizlik orani % 6.9'a dusmus.}
The class plays hangman (or wheel of fortune) by calling out the missing letters or words.

Lesson Plan 3

Data Collection: 4th
Date: 11/15/1996
Week of Instruction: 17

A. Set the Stage
Warm-up. Brainstorming. Teacher asks students to make a list of this week's headline news.

B. Assign Homework
1. Teacher checks to find out if the students have coordinated next week's schedule for this hour. Who will bring an article on Monday?

2. Teacher asks students if they feel the need to review discussions of:
a. this week's headline news
b. previously presented news items (on Monday instead of bringing a new headline news story.)

Information about the materials used during this hour:
Students take turns bringing news items. Each student selects an article from a newspaper, then finds the key words, provides a glossary and shows this article to the teacher. Teacher checks the article to approve the level, and checks the vocabulary. After adjustments and approval, the student makes a copy for each student and for the teacher to be used during the next day's class discussion.
Teacher announces: "Today we have 2 news articles. One is about an earthquake in theYellow Sea, the other news article is about an earthquake that hit a mine in Peru."

C. Group Discussion of Today's Headline News
Pair work: (*1 student—Darrin works alone, as requested)
Task # 1: Oral discussion. Each pair uses the information brought about the

Yellow Sea earthquake. They use this article as schemata — a real life context. They negotiate the meaning to formulate a Turkish summary of the article, giving all the important points and facts. (Translation is NOT allowed. This is a speaking class.)
Task # 2: Written summary. Each pair summarizes all findings in one paragraph under a headline or a theme statement.

Teacher moves around, attending to both groups and giving them feedback.

D. Presentations of the News Article
Each group shares its information with the entire class:
1. One member from each pair goes to the board and writes the paragraph that summarizes the article. The class takes notes. (There will be three different variations of the same article on the board.)
2. Each pair orally presents its headline news story to the entire class and answers classmates' questions about the article or their use of the language.
3. Teacher adds, responds to, gives feedback, explains as needed.

Repeat "C" & "D" for the second article

E. Review Previous Headline News (If Time Permits)
Groups discuss and review the previous headline news items that have been introduced to the class. Each group chooses a story or stories from the list that was generated at the beginning of the class. They select those that they feel the need to review.

Task: Students generate questions for each news item.

Students are encouraged to vary their language each time they review discussions of previous headline news, rather than memorize the headlines.

F. Play a Game
Wind-down:
1- The teacher writes a question on the board, based on a previously discussed news item:

Abd Meksika'ya Nicin 73 Helikopter Verecekmis?

2- Teacher puts the response with blanks under the question:

"U—[9]——[5]——[11] ILE MUCADELE ETMEK ——[4]"
{UYUSTURUCU MADDE KACAKCILIGI ILE MUCADELE ETMEK ICIN.}

The class plays hangman (or wheel of fortune) by calling out the missing letters or words.

Acknowledgments

I thank my professor Dr. Bob Oprandy, Practicum Coordinator Eve Connell, and Ms. Teresa McGarvey of Monterey Institute of International Studies for their observations and feedback. I also thank Dr. Kathi Bailey of Monterey Institute of International Studies for her help in the literature review of this paper, as well as Mr. Paul Bannes and Dr. Gordon Jackson of Defense Language Institute Foreign Language Center for their comments on earlier drafts of this paper.

Author

AYÇA DUTERTRE, Vice-President of the Academic Advisory Council (AAC), Assistant Professor, Turkish Branch, Middle East School I, Defense Language Institute Foreign Language Center, Presidio of Monterey, CA 93944-5006. Specializations: intensive teaching of Turkish as a foreign language, curriculum design.

Applied Language Learning
2000, Vol. 11, No. 1, pp. 123-154

Talking to Yourself
The Role of the Inner Voice in Language Learning

Brian Tomlinson
National University of Singapore

This article stresses the importance of the inner voice in second language (L2) learning and, in particular, its potentially valuable role in interaction with sensory images and affective impulses in creating mental representations of the world. Without an effective inner voice, it is very difficult to initiate ideas, develop thought, be creative, and respond intelligently to discourse, plan, control our feelings, solve problems, or develop self-esteem. Without an effective inner voice it is also difficult to develop an effective public voice. In learning a native language (L1), the inner voice develops naturally at the same time as the external voice. But in learning an L2 formally, the emphasis is often on the immediate development of an external voice. Many learners fail to develop an effective L2 inner voice and are therefore handicapped in their attempt to understand and produce the L2 intelligently and creatively.

The article outlines the characteristics and functions of the L1 inner voice by reference to a corpus of inner voice utterances collected from the author's self-introspection and from an experiment conducted with first language speakers of English at the National University of Singapore. It refers to experiments indicating that learners make little use of their L2 inner voice, it describes ways in which they are handicapped by their lack of an effective L2 inner voice, and it suggests approaches and activities which can help learners to start developing effective L2 inner voices as soon they start to learn the L2.

The main purpose of this article is to stress the importance of helping learners to develop and make use of an inner voice when learning a second or foreign language. In L1 the inner voice develops naturally at the same time as (or possibly even before) the external voice and the two systems complement each other. However in many L2 classrooms the external voice is given primacy from the very beginning and it is imposed on and inhibits the inner voice, thus slowing down thought and retarding creativity. I am going to argue that,

instead of demanding public performance in the L2 from the very beginning, we should encourage learners to talk to themselves in private, egocentric speech. But even before that we should allow them the privacy and silence to develop an inner voice by providing them with opportunities to listen to the L2 being used while being helped to respond silently. They can respond physically (or even in the L1) but they must be given time to think and they must not be forced to perform in a public voice without having an inner voice available to help them to prepare. However, before I outline ways of helping learners to develop an L2 inner voice, I would like to consider the characteristics and roles of inner speech.

What is the Inner Voice?

We use our inner voice when we produce speech sounds in the mind. We use it whenever we talk to ourselves, whenever we want to develop our responses and thoughts, and whenever we need to make decisions or plans. We use it far more than we do our public voice, which we use to interact with others. Unlike our public voice, which has to share many features with other public voices in order for it to be understood, our inner voice is private, personal, and unique. It is our own voice, which we can use and develop in any way we wish. If we stop reading for a few moments we should be able to hear our inner voice responding to what we have read so far.

The inner voice is also the voice that is used to achieve the articulatory loop, a means of making speech sounds in the head to aid the processing of language seen or listened to. This loop can be said to consist of two components, a "passive input phonological store" and "an active articulatory rehearsal process". "Phonologically coded information can be held in the phonological store, and refreshed by the articulatory rehearsal, in order to prevent trace decay; on the other hand, the articulatory rehearsal feeds phonologically recorded visual information to the store." (Trojano, Chiacchio, Cusati, Filla, & Grossi, 1992, p. 115). This articulatory loop is used to mentally echo some of the words we hear when listening and most of the words we see when reading. It does this so that we can personalize other people's words, so that we can give our own intonational impact to salient utterances, so that we can trigger off sensory and affective associations, and so that we can retain the words longer in our temporary store.

The inner voice does not operate as an isolated phenomenon but rather plays a part in creating multidimensional representations of meaning (Masuhara, 1998). It does so by firing neural connections which spark off and interact with sensory, affective and, sometimes, even motor phenomena (Esrock, 1994; Jacobs & Schuman, 1992; Kosslyn, Behrmann, & Jeannerod, 1995; Sadoski & Paivio, 1994; Tomlinson, 1996, 1997, 1998). Thus, for example, I might read the words, "At long last the cold drink arrived" and respond by saying "Great" with my inner voice, by seeing a visual image of a glass of my favorite beer, by mentally tasting the beer, by feeling relieved, and perhaps even by moving my lips and swallowing in anticipation of the drink.

What I am referring to as the inner voice has been given many names by researchers and is commonly referred to as inner speech (for example, by Sokolov (1972) who reviews investigations of inner speech from Egger (1881 - onwards) or silent speech (e.g., Edfelt, 1960; Vygotsky, 1956). Klein (1982, p.1) gives a full account of the different labels given to the phenomenon of producing speech sounds in the mind.

The inner voice is crucially different from the public voice, but it does use a different variety of the same language in order to achieve its functions. In this sense it is different from the mentalese posited by some philosophers and cognitive psychologists as a universal mental code used by all human beings (e.g., Pinker, 1994) and from Gattegno's "melodic integrative schemata" which provide a "more primitive experience of language than the words in heard speech, and are perceived much earlier than the words." (Gattegno, 1963, p.11).

What are the Characteristics of the L1 Inner Voice?

Our inner voice uses a restricted linguistic code to interact with sensory images and affective electrochemical impulses in order to achieve multidimensional self-communication. This linguistic code is similar to the restricted code claimed to be typical of the speech of the lower working classes by Bernstein (1971, pp. 77-81) in that it is fundamentally elliptical, vague, implicit, concrete, descriptive, and narrative; in that it uses a narrow range of vocabulary and structures; and in that it relies to a great extent on such nonverbal features as intonation and stress. Its grammar and lexis are similar to, but even more basic than, the grammar and lexis of spoken, unplanned discourse (Carter & McCarthy, 1998) and its pronunciation and intonation are similar to those of intimate, colloquial conversation. It is an essentially cotext and context dependent code which we understand by reference to previous utterances or to non-linguistic situations which we have awareness off. For example, a few minutes ago I said to myself, "Oh, I haven't. Why not?". Without the context, this utterance is meaningless, but to me it was obvious that I was expressing annoyance that I had not included Minghella in my references and I was rebuking myself for being careless. This context dependency means that the inner voice is often very vague in reference and we have no problems in understanding such self-comments as, "What a thing ... That's bad" because we know what sort of thing we are referring to and we know in what way it is bad. And because this voice is private and not monitored by other people, we do not worry about false starts, repetitions, and apparent grammatical inconsistencies. We know what we mean.

Inner speech has been characterized as reduced and as lacking in organization by such researchers as Sokolov (1972) and Vygotsky (1986). However inner speech is rich in potential. It is restricted not because it is defective but because it follows the brain's basic principle of economy, and because the interaction between inner speech, sensory imagery, and affect can produce a representation of meaning far richer than can be communicated by the public voice with its potential for clarity, specificity, explicitness, and elaboration.

In fact, it can be argued that inner speech is not reduced at all. It is the primary and basic form of communication which we have to expand in order to communicate with others. Sometimes if we are communicating with intimates, the expansion required is minimal as we share referenced contexts with each other. At other times the expansion and elaboration required is extensive if, for example, we are attempting to communicate complex ideas to people we do not know at all. This is an extremely difficult task for native speakers, and many of us fail to translate what we can say effectively to ourselves with the inner voice into what we want to say to others in the public voice. Imagine how much more difficult such a task is for the L2 learner who has not even developed an effective inner voice.

Let us consider some of the main characteristics of the inner voice.

The Inner Voice Is Elliptical

Because we share so much knowledge and experience of the world with our alter ego our inner voice is highly elliptical and our utterances frequently consist of verbless phrases such as, "Not again," "Same thing," and "During the term." I said the first phrase to myself on receiving yet another demand for payment of a bill I had already paid. I said the second when reading an article on writing (it represented the equivalent of, "The answer to that question is also that there is a great distance between using the inner voice and creating an appropriate text genre." And I said the third when a visual image of Tokyo flashed in my mind, I saw the word August, I remembered that the AILA Conference was in August, and I suddenly realized that the conference was during term time at the National University of Singapore. We do not leave out words because we are lazy or incompetent but because we do not need them. We are saving energy and time. We know what we are referring to and we only need to articulate our comments on it or our developments from it. If we used the public voice for thinking we would never have time to think at all. And yet that is what many L2 learners are encouraged to do.

Other examples of elliptical use of the inner voice include the following:

"Oh, so short only, ah?
"Alright, nothing very unusual."
"So bleak."
"Sad facts of life."
"Poor guy."
"Alright. Yeah. Sick, irritating."
"Why so much work?"
"Anything and everything."
"Rocky's.... Either Rocky's or hawker centre."

These examples of elliptical inner speech are just a few of the many such examples which were collected from an experiment I conducted with sixteen students at the National University of Singapore (NUS) who speak

English as their first language. Of the seventy-five inner speech utterances they reported, a few were not elliptical (e.g. "Hmm, where are the rhyming verses? Is there a pattern to it?") and this reinforces Sokolov's point that inner speech is not always abbreviated, especially when we reason or argue with ourselves or when we are interpreting difficult texts (Sokolov, 1972, p. 115).

In my experiment sixteen third-year students on an B.A. Oral Presentation for Professionals course at the National University of Singapore volunteered to take home and complete a questionnaire without knowing anything about it other than that it was part of some research I was doing. None of them knew what I was researching and none of them had studied or knew anything about the inner voice. All of them classified themselves as L1 speakers of English and their average age was twenty-one.

The first task on the questionnaire asked the respondents to read the poem "Have a Nice Day" by Spike Milligan in a relaxed way and reassured them that they would not be asked any comprehension questions afterwards. After reading the poem, they were asked to write down anything "you think you did mentally whilst and just after reading the poem." No mention was made of the inner voice and the responses were completely open. Nevertheless twelve of the respondents reported talking to themselves and ten mentioned seeing visual images in the mind. Two mentioned repeating lines in their heads and one said she used different voices in her head for the different characters.

The second task was to try to recall the poem without looking back at it and without writing down their recall. The respondents were told not to try to remember the text of the poem but just to recall the "gist" of the poem and the sequence of events. They were then asked to write down what they did in their mind whilst trying to recall the poem. Eleven respondents reported visualizing and ten reported talking to themselves. One repeated salient phrases, one tried to repeat the conversation in the poem and one imagined herself retelling the story to somebody else.

The respondents were then given three very short poems to read and were asked to write down after each one "the exact words" which they said to themselves whilst reading the poems ("Where do all the teachers go?" by Peter Dixon, "Missed" by Roger McGough and "Scintillate" by Roger McGough). A total of forty-seven inner voice utterances were reported.

Finally the respondents were asked to notice occasions when they talked to themselves over a particular day and to note down anything they think they said. They then responded to the following instructions on the questionnaire:

1. On what occasions did you find you were talking to yourself in English?
2. Why do you think you were talking to yourself on the occasions mentioned in 1 above?
3. What did you say to yourself? Please give some "verbatim" examples of what you think you said to yourself.

Thirty-five different occasions for inner speech were reported and sixteen different reasons were given for using inner speech on those

occasions. Twenty-eight examples were noted of inner speech utterances and these were added to the examples I had written down of my own inner speech utterances to build a small corpus.

The responses to this questionnaire plus my own introspection of my use of inner speech were used together with the findings of researchers such as Sokolov to form the basis for my categorization of the characteristics and functions of inner speech in the L1 (see pp. 3-23). There are obvious limitations in this research procedure, such as the narrowness of the sample, the unreliability of reported examples of inner speech and the fact that once inner speech is reported to others its function becomes social rather than personal. Nevertheless it does give at least an indication of when, why and how we typically use inner speech in the L1 and, if nothing else, it demonstrates just how important inner speech is for the maintenance of self-esteem, for the creation of meaning and for the development of thoughts, feelings and actions.

The Inner Voice Is Exophoric

Unlike our public voice, our inner voice rarely refers directly to words or phrases in immediately previous or subsequent utterances but rather to the context which is in our mind or to a mental representation of words we have read or listened to. Thus when I said to myself, " It's there" I was referring to the substance of my article already being in my mind and when I said, "Can't find any" I was referring to the fact that I could not find an example in the notes I had written in my diary.

Other examples of exophoric reference taken from my NUS corpus include:

"Why did I do that?"
"Didn't he get the hint?"
"Do something about it."
"She's so stupid."
"I need to write my paper first."
"Is there a hidden meaning ?"

The Inner Voice Is Implicit

Being explicit to ourselves would be uneconomical as we are able to fill in linguistic gaps effectively with sensory and affective connections and with cotextual and contextual reference. This is especially true of illocutionary force, which we have no need to mark at all. Thus I only needed to say to myself, "That it's secondary to?" rather than, "I disagree with Sokolov when he says that inner speech is secondary to external speech", and I only needed to say, "The **adult** inner voice" rather than, "I'm not sure whether Vygotsky is right when he says that the child inner voice is not organized but I'm convinced that the adult inner voice is very organized."

Other examples of implicit utterances in my NUS corpus include:

"Is money everything?"
"Just wait till I tell you what I have in mind."
"What to do now?"
"Rhymes well."
" No, maids do it."

The Inner Voice Is Incomplete

Not only are inner voice utterances usually elliptical they are often incomplete as well. This is either because we have changed the focus of our attention (e.g., "I'll buy.... Shit! It's eight already.") because it's highly predictable what we were going to say (e.g., "Tomorrow I'll read" - the completion would have been "Gadd," in reference to an article by Gadd which was sitting on my desk) or because we complete the utterance with a visual image ("I'll go by (visual image of a train)"). Another example of incompleteness from my NUS corpus was, "Now let me see. I can either do this or ..."

The Inner Voice Is Vague

Our inner voice can function effectively without being precise or explicit. When we use our inner voice, we are either reacting to or commenting on observable phenomena or on representations of the world in our mind. We are responding to and developing what we already know. Vagueness saves energy and time and is all we need when we can use sensory images and affective connections to provide us with the details. Thus the vague statement "I'll do it then" is very precise and explicit when connected to an image of repairing a door knob, to a preference for going for a drink now rather than spending time doing what I am not very good at, and to an image of getting up late on the public holiday tomorrow. Converting vague inner voice utterances into precise public voice utterances is one of the biggest problems we have in achieving effective public communication, and our failure to achieve this is a frequent source of misunderstanding and confusion. This is an even greater problem for L2 learners who often have no inner voice utterance to work from at all.

Examples of vagueness from my NUS corpus include:

"If only things turned out like that."
"Why did I do that?"
"Do something about it."
"Everything will turn out fine."
"Weird. Doesn't make sense."

The Inner Voice Is Narrow

Our inner voice uses a narrow range of lexis and grammatical structures. Occasionally we entertain ourselves by playing with language in our inner voice and by looking for subtle combinations of words and structures, but most of the time we use core vocabulary and basic structures to produce short utterances. But, as de Guerrero (1994) suggests, inner speech might be syntactically restricted but it is semantically "highly condensed."

In my NUS sample of 75 inner-voice utterances, the average length of utterance is four words, all the utterances are in the active voice, nearly all of them have simple aspect, none of them have perfective aspect, none of them contain a subordinate clause, only three of them contain a conjunction (all coordinators) and most of them use only core vocabulary. The problem comes when we translate inner-voice utterances into public-voice utterances and we have to strive for appropriateness and effect. Then we need to make use of a wide repertoire of lexical and grammatical options in order to achieve the intended communicative outcomes. For L2 learners the problem is even greater. They often have to try to translate from an ineffective inner voice into a "planned" public voice, and in many cases they translate from an L1 public voice instead.

The Inner Voice Is New

In the inner voice we only say to ourselves what is new to us. So most of the time we focus on the comment rather than on the topic, on the predicate rather than on the subject. "In inner speech, it is never necessary for us to name that about which we are speaking, i.e., the subject. We always limit ourselves only to what is being said about this subject, i.e., the predicate" (Vygotsky, 1956, pp. 359). This might not be always true (especially in complex thought development) but it is certainly common, as is shown in the following examples from my NUS corpus:

"Must be written by a kid."
"Still doing their work."
"Liked the picking of noses part though."
"Low self-esteem."
"Sounds like an archer or a shooter."
"Thought quite witty."
"So corny. Especially after the previous two."

The Inner Voice Is Relevant

In the inner voice we only say to ourselves what is directly relevant or necessary. "Mental speech is structured according to the principle that statements be kept strictly to a minimum" in contrast to "external speech (vocalized or written) which requires a great redundancy of communicated information"

(Sokolov, 1972, p. 260). We do not repeat, paraphrase, qualify, explain, give examples, or use any other kind of redundancy (or at least there are no examples of these common features of the public voice in my corpus of my own inner voice utterances or in my NUS corpus). The problem comes when we translate into the public voice and we need to add effective redundancy to make sure our utterances are reader or listener friendly.

The Inner Voice Is Egocentric

The inner voice is totally egocentric and idiosyncratic. It is used by us, to us and for us and it does not have to consider anybody else (or as Vygotsky (1956) says, inner speech is "to oneself" and "for oneself"). For example, "vocabulary frequently assumes a very individual, subjective significance and is complemented by graphic images" (Sokolov, 1972, p. 3) and words are used according to their psychological meaning as experienced at a given moment rather than their logical meaning expressed as a formal definition (Jacobson, 1911). Sokolov characterized the semantics of inner speech as "more contextual and idiomatic" and claimed that using "not only the objective meaning of words but all of the intellectual and affective content connected with it ... must lead to the dominance, in inner speech, of the contextual meaning of words over their objective meaning" (Sokolov, 1972, p. 48). Of course, when translating into a public voice we have to consider addressee factors and we have to modify our utterances to take into account the status, roles, interest, knowledge, goals, norms, and age of the addressees and our relationships with them.

The Inner Voice Is Coherent

Lantolf and Pavlenko (1995, p. 111) say that, "At the outset, private speech is structurally identical to social speech, but as it moves toward its mental function as inner speech, it becomes increasingly elliptical in appearance and less coherent to the ear of one listening to it." It might be incoherent to an eavesdropper but it is coherent to ourselves. We know how an inner-voice utterance is connected to what has gone before and we know its illocutionary intent. For instance, when I said to myself, "Very revealing actually" I knew that I was referring to my NUS corpus of inner-voice utterances and that my expectation had been that the students would translate their inner-voice utterances into public speech when writing them down. Therefore I was expressing surprise and relief that they did not translate into public speech, as well as anticipating objections to my research procedure at a conference presentation I was going to give at the University of Seville. All this knowledge makes the utterance totally coherent to me but the lack of this knowledge would make the utterance incoherent to anyone hearing me say the words aloud. And, of course, that is another major challenge of public speech: maintaining coherence whilst translating from the inner voice to the public voice. This is particularly difficult for L2 learners who are often translating from an

incoherent inner voice, from a coherent L1 public voice or from no voice at all. Helping learners to develop the skill of going from a thought to coherent L2 inner-speech articulation of the thought and then to L2 public enunciation of the thought should be one of the most important objectives for any language teacher. This can be done by giving mental response time to learners rather than always demanding immediate answers and by devising inner-voice activities which help the learners to talk to themselves in the L2 (either silently or aloud) before speaking or writing in the public voice.

The Inner Voice Is Simple

Vygotsky (1956, p. 359) describes inner speech as "simplification of syntax, a minimum of syntactic breaking down, expression of thought in condensed form, a considerably smaller number of words." While I would disagree with the implication that inner speech is a secondary, simplified version of public speech, I would agree with Vygotsky that above all else the inner voice is usually simple. It achieves its goals easily, quickly, and efficiently. Just imagine how restricted we would be if we had to use our public voice for inner speech. This is, of course, the position that many L2 learners find themselves in. They often have to talk to themselves in an L2 public voice, because they have not been helped to develop an L2 inner voice, and because their only exposure has been to the L2 public voice of their teachers, to their own L2 public voice, and to the L2 public voices of their peers.

Is the Inner Voice Stressed?

It seems to me that most of my inner voice utterances are given stress on every word. This could be because we normally only say to ourselves what is salient, and therefore we minimize the use of unstressed function words in inner speech. For example, I have just heard myself saying, "**totally grammatical**" and I actually saw in my mind the words in bold type as I heard myself saying them. When I said these words to myself, I was thinking of the possibility of collecting a corpus of inner-speech utterances and then writing a grammar of inner speech, I was anticipating objections that inner speech is not grammatical, and I was imagining myself retorting. I did not say to myself, "It's totally grammatical"; I just used the content words. In the same way, I have just heard myself saying **"Stressed"** to represent what I would probably communicate in public speech as, "A lot of it is stressed". It could be that L1 children use a lot of word stress in their early public utterances because what they have repeated with their "articulatory loop" from the adult input consists mainly of predicates and, in particular, the stressed syllables which they contain (i.e. the salient parts of the utterance) and therefore of words which are stressed (see Mandel, Jusczyk, & Kemler Nelson, 1994 for research which demonstrates the importance of relative prominence in sentential prosody in helping infants organize and remember speech information). This highly stressed intake feeds the generalizations which generate their early output and could result in extra

word stress in comparison to adult speech. For example, a child who hears, "We're all **go**ing to the **beach"** is likely to repeat "**go beach**" with her "articulatory loop" and in her private speech is likely to produce utterances in which each word is given stress (e.g. "Go town", "Play ball," "Watch TV"). This could be what happens naturally in L2 too with the L2 learner repeating salient words from the predicate in the input (i.e. stressed words) and thus developing an inner voice which produces utterances consisting mainly of stressed words. But, of course, if this inner voice is manifest as private speech or public speech in the classroom, it is often corrected by the teacher providing unstressed function words. These words are then overstressed by the learner, thus causing "pronunciation problems" in public speech and overload problems in inner speech.

The points above are speculative and result from introspection rather than research. But they do suggest that it is important that teachers are aware when L2 learners are using inner speech out loud and that they do not then provide public speech corrections. They also suggest that it would be useful for the teacher sometimes to use inner speech out loud when doing a task (e.g., when writing on the board or adjusting an OHP).

What Are the Main Functions of the L1 Inner Voice?

In my NUS experiment I asked my sixteen respondents to monitor their use of the inner voice over the period of a particular day and to write down when and why they used their inner voices. Their responses to the question, "On what occasions did you find you were talking to yourself in English?" were as follows:

Wondering what I'm going to do on Saturday.
Wondering where to take a friend for dinner.
All the time.
When under stress.
When feeling uneasy.
When angry, frustrated.
Thinking about a problem.
Trying to put things together.
When alone and when talking to others (trying to get what they're saying).
When fed up or impatient with others.
When I was happy and wanted to congratulate myself.
When I was bored, when I switched off during lectures, when I was under pressure.
When doing work.
When day dreaming.
Every moment in my life - dreams, thoughts, wakefulness.
When playing cards.
When angry, irritated, confused.

In the toilet.
In lectures.
When I didn't understand the textbook.
When driving.
Watching a movie.
Reading.
Singing.
When reading a poem in my mind.

Their answers to the question, "Why do you think you were talking to yourself on the occasions mentioned in 1 above?" included:

Preparing to speak to someone.
Just thinking out my thoughts.
Helps to relax when tense.
Reasoning to myself.
Clarifying doubts.
Clarifying thoughts.
Organizing thoughts.
Reflexive.
Mind always working - always talking to yourself.
Advice to self.
Reassurance - "I tell myself things which will help me to feel better."
Helps to clarify thoughts.
When feelings at a high level.
Making remarks on the scenario I imagined.

From their reports, the sixteen BA students seem to have made frequent use of their inner voices to perform important functions. This was true also of another group of first-language speakers of English at NUS (seven MA students) who answered the same questionnaire orally as the BA students had done in writing. At first they were embarrassed to "confess" that they talked to themselves all the time but when they realized that this was normal they independently revealed very similar uses of the inner voice to those listed by the BA students and to those discovered by most researchers into inner speech. It seems that using the inner voice is crucial for our self-esteem, our self-control, the expression of our self and our interpretation and contribution to the world around us. Imagine being a learner in an L2 classroom in which the activities you are involved in inhibit the use of your L1 inner voice and retard the development of an L2 inner voice. Suddenly you lose self-esteem and self-control, you are unable to express your inner self and you cannot interpret or contribute to the world around you.

Let us look more closely at some of the functions of the L1 inner voice.

Repeating

One of the vital functions of the inner voice is to repeat utterances that are being listened to and to give a voice to words which are being read. Teachers often warn learners of the bad habit of sub-vocalizing, and yet all the research evidence suggests that we need to say other people's words in our head in order to understand them and to establish a mental representation of them.

This phenomenon has been demonstrated to be a normal and functional feature of the listening and reading processes by many researchers. Blonskii (1964) claimed that inner speech originates simultaneously with spoken speech and demonstrated that it is necessary to reproduce the speech of the speaker when listening. Edfeldt (1960) used surface electrodes to measure the action potential of the vocalis muscle in an experiment in which eighty-four participants read different types of text. He concluded that inner speech occurs in the reading of all persons, increases with text difficulty and is likely to aid reading performance. McGuigan (1964), Hardyck (1968), Cleland (1971), Sokolov (1972), and Klein (1982) conducted electromyographic studies of inner speech during silent reading (and in some cases, for example Sokolov, during listening activities) and came to similar conclusions. Sokolov, for example, demonstrated that, "silent reading is always accompanied by motor speech tensions of varying intensity, depending on the complexity of texts and on reading habits" (p. 211) and Klein concluded that, "Inner speech has been shown to be an important facilitative aid used by all normal readers, especially under difficult textual conditions" (p. 60). Geschwind (1979, pp.109) says that "It seems that the comprehension of written words requires the auditory form of the word be evoked in Wernicke's area," Gathercole and Baddeley (1993) regard this "phonological loop" to be particularly important in the comprehension of long and syntactically complex sentences, and Anderson (1995) considers it to be a way of achieving a "back up store to be consulted during off-line linguistic analysis".

It would be extremely useful to encourage L2 learners to repeat mentally what they are reading silently. And yet the myth that inner speech during L2 silent reading is aberrant and detrimental is still perpetuated today (for example, see Nuttall [1996, p. 58] and Willis [1996, p. 72].

Mental Representation

We do not process a text (or any other experience) directly. We process our mental representation of it. This representation is created as a result of connections between the text and our prior experience which are achieved through the use and interaction of visualization, inner speech, and affective responses. As Minghella (1998) says, "So much of the pleasure in reading a novel is the creating of an inner landscape in which the narrative plays out , with each reader providing face and voice to a character, dramatizing events in the mind's eye. Reading is personal and private." In an experiment which I

conducted at the University of Luton in 1997, I asked twenty one proficient readers to read an extract from *Brazil* (Updike, 1994) and then to report on their reading process. All twenty one said they visualized whilst reading and eighteen said they talked to themselves in their heads (Tomlinson, 1997). In a similar experiment at NUS involving the reading of poems, twelve of the sixteen proficient readers reported using inner speech to help them to understand the poems and ten reported using visualization.

The verbal contribution to the process of mental representation is emphasized by Appel and Frawley (1994) when they say that, "People can construct meaning from a text after the reading process itself has ended. They do this by conversing with others, with the self in the presence of others ..... with the self in the presence of no one other than the self." Tomlinson (1996; 1997; pp. 110-114; 1998) focuses on the role played by visualization in this process of mental representation, as does Rosenblatt (1994, p. 1067) in her theory of aesthetic response. Sadoski and Paivio (1994), in their dual coding theory, describe the interaction between the verbal and the nonverbal (i.e., sensory) codes during mental representation. And Masuhara (1998) develops a theory of multidimensional representation in which inner speech, sensory images, and affect all play a part in firing the neural connections which achieve mental representation for the reader. As can be gathered from the references above, most of the research on mental representation has been conducted in relation to reading. But inner speech also plays an important role in the mental representation of what we listen to (Stevick, 1986) and of non-linguistic experiences too. It also plays an important role in the initial representation of what we want to say or write in our public voice.

Many of the inner-speech utterances in my NUS experiment were helping the speaker to achieve mental representation of the poems they were reading:

> Sounds like a poem for kids.
> Must be written by a kid.
> Why did he miss?
> Sounds like the lyrics of a song.
> Reminds me of, "Where has Mama gone? Where has Papa gone ? Far, far away."
> Sounds like one of those Britons on social welfare.
> Why ten past three?
> Must be quite old now.
> A person's reflection of his life.
> He is repentant.
> Who is this person? A male? A female?
> Jaded woman.

In contrast, L2 learners seem to focus their processing energy on linguistic decoding and make little attempt to use visualization or inner speech to achieve mental representation (Auerbach & Paxton, 1997; Masuhara, 1998; Tomlinson, 1996, 1997,1998). Helping them to talk to themselves whilst reading

could increase their ability to achieve multiple-dimensional representation of what they are reading.

Connecting

Connecting is a vital part of the process of understanding and representing experience, as it enables us to relate what we are reading, listening to, seeing or taking part in to our existing knowledge of the world and our views about it. Many of these connections are made through sensory images but the inner voice also has an important part to play. In reading and listening, "... to establish connections and relationships of some kind between two sentences being comprehended separately, both of them must be kept in mind. Without a fixation of the preceding sentence it cannot be linked to the next." (Sokolov, 1972, p. 117). In addition to this holding role, inner speech also helps us to remember similar phenomena to those we are experiencing and to use our understanding of them to help us to interpret and represent the phenomena we are currently experiencing. In other words, inner speech helps us to use the old to understand the new.

There were a number of examples of the inner voice used to make connections in my NUS sample. They were all reported to have been used by students to help them connect the poems they were reading to what they know. The examples include:

> Sounds like an archer or a shooter.
> Sounds like one of those Britons on social welfare.
> Smelly socks.
> Sounds like that song .....
> No, maids do it (in answer to a rhetorical question in a poem).
> Sounds like me.
> Scintillate— shine, reflect.

Many L2 learners seem to be too preoccupied with understanding the words they are reading to make the inner voice connections which could help them to better understand and appreciate the text (Masuhara,1998; Tomlinson, 1996, 1997,1998).

Responding

By responding I mean expressing views on what you are reading, listening to, or experiencing. Responding is governed by each person's prior experience and their views on life and is an extension of mental representation. The uniqueness of each response to the same text or other experience explains how, despite considerable convergence of decoding among a group of similar people, there can be considerable divergence of understanding too.

The examples of responding reported by the students in my NUS corpus were mainly egocentric reactions to the poems they were reading or reactions to what other people had said to them. The responses included:

So funny. Weird, doesn't make sense.
It's cute.
Such a loser but yet quite a pitiable character.
This is depressing!!
Whoever this is, he is such a loser.
That's quite sad.
It's funny.
Poor guy.
Sounds like me.
Oh shit. Well done (sarcastic).
Yeah. I thought better of you.
Didn't he get the hint?
If only things turned out like that.
Why so much work?

L2 learners seem to suppress their ego when reading and they seem to be much more concerned with achieving convergent comprehension rather than personal response (Tomlinson, 1997). This could also be true of their reactions to what people say to them; they could be more concerned with demonstrating their understanding of the utterance rather than with their personal response to what was said.

Remembering

It is not our actual experience of the world which we store in memory but our personal mental representation of that experience. Likewise, it is not normally the language we encounter which we commit to memory but our mental representation of it (Sadoski & Paivio, 1994). Repetition of what we hear and read is necessary to achieve the short-term memory which enables us to achieve mental representation of the utterance. Those utterances which we rephrase, explain to ourselves, and comment on are most likely to be regarded as salient, and their mental representations are more likely to be remembered. Those utterances which we do not repeat and which we do not talk to ourselves about are unlikely to be remembered at all. In a number of experiments, Sokolov (1972, p.113) showed that without speech movements when listening, "instantaneous amnesia" occurred, but that even if words were repeated in an "extremely abbreviated form, at times hardly perceptible hints at words" then their representations were likely to be remembered.

Recalling

When trying to recall what we have heard, read or experienced, talking to ourselves can help to spark and supplement sensory images which can

bring back our representations of what we are trying to recall (Sadoski & Paivio, 1994, p.593; Tomlinson, 1997, pp. 133-136). These sensory images (mainly visual) can then be translated into inner speech in preparation for public recall.

The sixteen respondents in my NUS experiment were asked to recall a poem without looking back at it or writing down their recall and then they were asked, "What did you do in your mind whilst you were trying to recall the poem ?" Ten of them said that they talked to themselves about the poem (e.g., "I asked myself," "I imagined retelling the story to somebody else," "I tried to recall the conversation."), and eleven of them said they visualized scenes from the poem. One of them said that she used words and pictures in her head at the same time to help her to recall the poem. In a similar experiment I did with a class of L2 learners at Kobe University, the only learner who achieved extensive recall said that he had recalled visual images generated by the poem and had then turned them into words in his head (Tomlinson, 1997). Most of the other learners achieved very poor recall because they concentrated on trying to recall actual utterances from the poem.

Developing Thought

Probably the most crucial function of the inner voice is to develop thought. There is great controversy about what thought actually is and how it is initiated. Binet (1903) concluded from experiments in which he tried to prevent his daughters from using inner speech that thoughts often come from a sentiment of some kind, an emotional attitude, but they are then developed through inner speech. Huey (1968) accepts that thought starts as a subconscious, nonverbal phenomenon but says that, "there can be little doubt that the main meaning comes to consciousness only with the beginning of the sentence-utterance, *(he is referring to inner speech*) and the reader does not feel that he has the complete sense until he has spoken it." I think that most of my thoughts originate as sensory images, but I would agree with Sokolov (1972, p. 121) that there is a "presence within us of large thought complexes, expressed through slight verbal hints. In conveying our thoughts to others, we unfold them, using these semantic complexes as support, and, depending on the situation, to impart to them a more or less full verbal expression." I would also agree with Sokolov when he says that the performance of mental acts is accelerated by reduction in internal speech in which "unfolded reasoning" is replaced by "a very abbreviated and generalized code—a language of "semantic complexes" (reduced verbal statements sometimes combined with graphic images)" (1972, p. 71). I would also agree with him when he refers to the "extremely complex functioning of verbal thought mechanisms during transition from inner speech, where thought appears in a very abbreviated and complex form, to external speech intended to make the thought understandable to the listener or reader (i.e., it has to be transformed into a logically and grammatically presented series of judgments or sentences)" (1972, p. 67). Imagine how much more difficult it is for the L2 learner who often attempts to go straight from the initial undeveloped thought to a public enunciation of it.

Planning

In planning future courses of action by ourselves, we use visual imagery plus instructions to ourselves (e.g., when playing chess or cards, when working out an itinerary for a visit, when organizing a conference). For example, I have just seen images of myself doing various tasks tomorrow and I heard myself saying, "I'll finish it first" (with reference to this article) and "Then the abstract" (with reference to a conference presentation that I am going to make). Examples from my NUS corpus of the inner voice being used for planning are:

> Rocky's .... either Rocky's or hawker centre .... can
> order half a pizza or one pasta to share.
> Now let me see, I can either do this or ....

An obviously useful activity for L2 learners would be to get them to use their L2 inner voice to plan their part in an activity (or even to plan their day) before communicating their plan to others.

Deciding

Vygotsky, working in the 1920s, was particularly interested in private speech as a problem-solving tool and considered articulating the problem to yourself, presenting the options to yourself and announcing a decision to yourself as very important functions of the private speech of children and, by implication, the inner speech of adults (see Vygotsky, 1956,). Certainly I am aware that I spend a lot of time talking to myself whilst trying to make a decision. I present the pros and cons to myself and seem to follow all the "could" utterances with "but" utterances (e.g., "Could switch to Soccernet. But want to finish tonight.") Examples of aspects of decision making in my NUS corpus include:

> Oh dear. I'm going to be late. Should I run after the bus?
> I think I should go get some food.
> What to do now?
> Why did he miss?

In L2 textbooks there are many problem solving activities. Typically learners are asked to do them in groups and the teacher monitors their public discussion. Getting the learners to do some of these activities mentally could encourage them to develop and use their L2 inner voice.

Reassuring

I often reassure myself when things are not going well by telling myself about my qualities, by talking of some potentially positive future event, by making excuses, by blaming other people, by giving myself advice, or by just mumbling expressions of support. Not many researchers refer to this function in L1 inner speech, but there are a number of examples of self-reassurance in my NUS corpus:

> All right, calm down now - there's nothing to be afraid of - he's just an asshole - there's no point getting this angry.
> She's so stupid. I need to write my paper first. Relax, don't panic.
> Everything will turn out fine.

A useful L2 activity would be to encourage the learners to comfort and reassure themselves using an L2 inner voice. This could be done on a regular basis to help learners to reflect on their progress and before potentially stressful activities such as presentations and tests.

Preparing for Public Speech

Ausubel, Sullivan, and Ives (1980, pp.439-440) discuss the role of verbalization in facilitating the "transformational processes involved in thought" and in refining and enhancing the meanings of the "emerging subverbal products" of thought "prior to naming them." And Sokolov quite rightly asserts that, "external speech is functionally dependent on inner speech." (1972, p. 65). Prior to speaking or writing to others we fix our thoughts in our mind "with the aid of inner speech, formulating a mental plan or a synopsis of some sort for our future statement. This takes on an even more definite shape in writing when each contemplated phrase or even word to be written is preceded by its mental enunciation, followed by a selection of those most suitable" (p. 65). The inner voice prepares for the public voice by formulating vague phrases, expanding upon them, trying out alternatives, monitoring draft expressions for accuracy, appropriateness and potential effect and then monitoring and revising our actual public translations of out initial inner utterances.

This very important preparatory function for public communication is the one most difficult to achieve. Most of us are adept at using our inner voice to achieve most of the functions outlined above. But many people have problems in using the inner voice to prepare for the use of the public voice because they have to expand, elaborate , modify, complexify, exemplify, make explicit and make coherent to particular addressees what is self-evident to themselves. This is not at all easy, especially if you have to do it for people you do not know and even more especially if you have to do it in unplanned discourse in which the time available for translation from the inner voice to the public voice is minimal. Which is why, of course, we experience so many false starts,

rephrasings, repetitions, hesitations, pauses and incomplete utterances in spontaneous public speech. But if this is difficult in the L1, imagine how much more difficult it is in the L2, especially if you have to translate from the L1 inner voice or if you are trying to prepare for your public L2 voice by using an imitation of it as your inner voice.

Monitoring

While speaking or writing with the public voice we are constantly monitoring our production for accuracy, appropriateness, and effect. Gattegno (1963, p. 29) says "while we are engaged in the jobs of talking, writing, discussing, etc., part of our consciousness is occupied in supervising the activity and in feeding back to the self in charge information that is used at once to let the flow go on or to introduce corrections where needed to equate the objective material produced with the schema that preexisted and provoked the activity." He says that "inner criteria" in the mind are used to perform this role and they can be seen as "links between neurons in the brain." I would add that it is the inner voice (in association with mental imagery and affect) which is often used to apply these criteria and to make the "corrections." It seems that L2 learners usually monitor their production in the L1 (e.g., Swain,1998) and thus lose opportunities for developing their inner voices in ways which could help them to speed up the correction process.

It is noticeable that most of the functions of the inner voice outlined above involve reacting to experience. The mind is providing a running commentary and is vocalizing its reactions either to its own activity or to events and sensations from the outside. It is evaluating these phenomena and usually does so in an affective, rather than a dispassionate, way. The words which we say to ourselves are often more extreme than the ones which we subsequently say to others and we usually regret it when, in extremis, we let out our inner voice. Interestingly, these three characteristics of being reactive, evaluative and affective, which seem to dominate L1 inner speech, are not typically significant features of L2 learner responses to encounters with the target language. When reading or listening, L2 learners tend to aim at comprehension rather than reaction, at acceptance rather than evaluation and at neutrality rather than affect (Masuhara, 1998; Tomlinson, 1997). Encouraging them to develop an L2 inner voice could help to make learners more independent and powerful and to achieve the greater engagement in their encounters with the L1 which could facilitate language acquisition (Dulay, Burt, & Krashen, 1982).

What Happens in the L2?

Emphasis on the Public Voice

It is very difficult to use an inner voice when learning an L2 from formal instruction. When we learn our L1 we do so in what is primarily a private

and personal way. We talk to ourselves before we talk to others and even when we talk out loud we are often using a private voice which is self-directed (Vygotsky, 1986). When we learn an L2 in the classroom we are usually required to use a public voice from the very beginning. We are not normally given time to talk to ourselves but are required to participate in social interaction. Our L1 inner voice is inhibited by the need to produce L2 utterances that will be subjected to public scrutiny. So, instead of developing thoughts and ideas in our heads before speaking them aloud, we often put all our mental energy into finding the right L2 words in the right form and the right order. We use the L1 inner voice for translating from L1 to L2 and for monitoring the correctness of our utterances in the L2 (see Swain, 1998 for an example of learners of French using their private English voices to monitor what they are producing in French). And in most cases we do not develop an L2 inner voice for a very long time because most of the activities we participate in as beginners demand instant responses and ask us to report our experience rather than to process it, because we are afraid to be "ungrammatical" in our heads in case this interferes with what we say aloud and because the de-contextualized triviality and blandness of much of the language we are required to process and produce does not encourage thought.

In experiments which I conducted at Kobe University and the University of Luton, I asked native speakers and L2 intermediate learners to read short texts (poems and extracts from novels) and then to reflect on their reading process. In all the experiments the native speakers reported speaking to themselves and seeing mental images but very few of the L2 learners reported either of these processes (Tomlinson, 1996, 1997, 1998). A similar result was reported by Masuhara (1998) when she asked native speakers and L2 learners to think aloud as they were reading the beginning of a novel. The native speakers reported their inner speech and their sensory images whereas the L2 learners reported their attempts to decode and translate the words of the text.

Inhibition of the Inner Voice

If we do develop an inner voice in the L2 and we let it out as a private voice during classroom activities we are usually monitored and corrected. For example, Frawley and Lantolf (1985) claim that what appears as erroneous L2 performance is often a reflection of the mental orientation of the speaker rather than a failure to use the L2 correctly. This is supported by McCafferty (1994b) who reports an experiment in which a low-intermediate participant and an adult native speaker narrate a series of six pictures in which a hat seller falls asleep. The L2 learner uses private speech to label the components of each frame (e.g., "Monkeys are playing in the tree.") in order to make the task known whereas the native speaker achieves a coherent and cohesive narrative account focusing on events rather than objects (e.g., "He tries to get the monkeys to give him back his hats." (p. 426). Frawley (1992) also investigated the use of private speech by L2 learners during communication tasks and concluded that, "The elements that tend to be maintained in private speech concentrate the speaker's

attention in uniquely positioning the speaker in relation to the task" (as in an example of a learner who just said "green" to himself whilst doing a jigsaw puzzle with other members of a group). Confronted with this use of private speech when learners are compelled to interact in English whilst performing a task, teachers often monitor (and even correct) it as though it was public speech and thus discourage the learners from using inner speech in case they "let it out". But without an effective inner voice we cannot produce meaningful public speech ("external speech is functionally dependent on inner speech" (Sokolov, 1972, p. 65)) and without finding our own inner voice in the L2 we cannot achieve creativity or self-regulation (di Pietro, 1987).

Obvious pedagogic implications of the points made above are that teachers should encourage inner speech or private speech both before and during communication activities, and as a preparation for public expression of ideas and conclusions. But it is crucial that the teacher does not monitor, and must not correct, any private speech utterances spoken aloud by the learners.

Consequences of the Inhibition of the Inner Voice

Inner speech is "the principal mechanism of thought, with the aid of which there takes place goal-directed selection, generalization, and storage of sensory information (data provided by sensations and perceptions)" (Sokolov, 1972, pp. 263-264). If the development of an L2 inner voice is retarded and the use of the L1 inner voice inhibited by tasks requiring the focusing of processing energy on low level linguistic decoding, then very little creative thought is possible and the learner is diminished. And, of course, if thinking is done in an attempted L2 public voice it will inevitably be conventional, superficial and very slow ("The process of external speech needs... much more time than does inner speech to express thoughts." [Sokolov, 1972]).

Ushakova (1994) argues that the inner speech which we develop as children remains with us and provides a foundation by which all future language learning is supported. There is certainly evidence that in natural L2 language acquisition (in which the learner acquires the language from meaningful and motivated interaction with it) the learner first of all makes use of a silent period to develop an L2 inner voice. This inner voice is sometimes externally manifest as a whispered private voice that can be heard when the learner is listening to or reading the L2 in the presence of other people (just like the L1 child acquirer).

Saville-Troike (1988) used wireless microphones to document the strategic learning functions in the private speech of L2 child learners during the prolonged silent period they went through prior to their willing production of public speech. She found that they used private speech to achieve repetition of other's utterances, recall and practice, creation of new forms, substitution and expansion of utterances, and rehearsal for overt social performance. I found similar uses of private speech amongst Indonesian beginner learners of English who were allowed a five-week silent period during a large-scale experiment in which some first-year secondary school classes followed a TPR

program instead of doing the production drills featured in the textbook (Tomlinson, 1990). It does appear that allowing time for mental responses during L2 learning facilitates not only the ability to achieve meaningful mental representation but also the development of an inner voice which helps the learner to personalize the new language, to develop confidence in using it internally and ultimately to achieve fluency and effect in an external voice. But to achieve this in the classroom requires silence; and language teachers are afraid of that. Instead, we insist on instant responses and public performance and the result is that the learners focus nearly all their processing and creating energy on the public verbal code and neglect the inner verbal code, the sensory code and the affective code which in L1 use help us to achieve the multidimensional representation which is vital for the creation of meaning.

Use of L2 Inner Speech by Advanced Learners

It does seem though that advanced L2 learners make use of inner speech and private speech to help them to achieve mental representation. Appel and Lantolf (1994) report how advanced L2 English speakers trying to produce oral recalls of texts used private speech to try to understand as well as to recall the texts. De Guerro (1994) conducted a large-scale study of Puerto Rican college-aged learners and concludes that inner speech plays a central role in rehearsing short-term memory features (phonological, lexical, and grammatical) so as to transfer to long-term memory and that it helps L2 learners to gain confidence and lose anxiety about speaking the language as a result of internal rehearsal. McCafferty (1998) gave narrative recall and picture relation tasks to Japanese and Venezuelan intermediate and advanced learners and found considerable use of private speech (often accompanied by gestures) in order to achieve object-, other- and self-regulation. He also found that the students used self-regulatory gestures after brief pauses and he suggested a possible connection with inner speech. Masuhara (1998) reported how advanced learners reported more inner speech and more visual images in their think-aloud protocols of a reading activity than intermediate learners did. And in my experiments referred to above all the proficient L2 readers of English reported talking to themselves and visualizing whilst reading, as did all sixteen third-year students at the NUS who read a poem by Spike Milligan and then reflected on their reading process. These students subsequently also reported using their inner voice whilst engaging in conversation, whilst listening to lectures, whilst writing essays, whilst mentally responding to what they heard people saying, whilst planning what to do and while standing at the bus stop.

The big question to be asked is, "Do advanced learners only make use of their inner voice once they have become advanced or does their ability to use the inner voice help them to become advanced?" I am certainly convinced that the inability to develop an effective L2 inner voice prevents many learners from achieving meaningful communication in the L2 and therefore prevents them from ever becoming advanced. As a failed learner of French (with an A Level in French) I tried to reflect on the process of reading

an advanced text in French and found that I was using all my processing energy in trying to decode the words that I did not know. As a result, I could not remember what the text was about when I had finished reading it. I then read another advanced text in French but this time I made myself read the text aloud in my head in French, I made myself visualize and at the end of each paragraph I did a mental summary using my L1 inner voice and the images I had created. The result was that I managed to stop myself from excessive decoding and translation, that I understood and enjoyed the text and that I have a mental representation of the text even now (Tomlinson, 1997, pp. 277-279).

How Can We Help L2 Learners to Create Meaning with Their Inner Voices?

Suggestions

One way of helping learners to develop an L2 inner voice is to offer beginners an initial silent period of experiencing the language in use without having to focus on the correct features of the L1 public voice or to produce any utterances publicly. Later the learners can be given problem solving tasks to do (in groups, in pairs, individually) and be encouraged to use a private voice to help them to articulate and solve the problems. The utterances they produce should not be monitored and must on no account be corrected. As McCafferty says (1994b, pp.199), private speech (provided it is not corrected) helps "students learn how to control anxiety about a task". Later in the course the learners can be asked to participate in tasks in which they use their private and/or inner voice to help them to prepare for production in their public voice (according to de Guerro, 1994), L2 learners gain confidence and lose anxiety about speaking the language as a result of internal rehearsal). Their private voice should still not be monitored or corrected but their public voice utterances can be used (after responses have been given to their meaning) for discovery activities in which they are helped to note the gaps (in accuracy, appropriateness, and effect) between their public utterances and those of L1 speakers doing a similar task. If such an approach is not possible because the learners need to be able to produce the new L2 instantly (or because they live in a L2 environment and have been producing the language already), then the same procedure can be profitably followed within a lesson (i.e., silent speech activities first, then private speech activities and then production activities).

As Vygotsky (1956) says, inner speech is similar in many ways to colloquial speech. The L1 child learner is exposed to colloquial speech most of the time but most L2 beginners are exposed only to planned and formal speech. It is very important therefore that L2 learners first experience the L2 in its colloquial, unplanned form so that they can acquire a variety of the language that can facilitate the development of an inner voice. Try talking to yourself in a voice which operates in a planned discourse mode with written grammar, cohesion and stylistic effects and you will see how difficult this is. This means that the teacher should chat to the learners naturally rather than delivering

pre-planned sentences and that stories, descriptions, instructions etc. should be given informally and spontaneously rather than in the planned and often scripted form which characterizes many beginners classrooms today.

Drills and controlled practice exercises by definition require instant and correct responses. They might have some value in developing a formulaic competence but their overuse can prevent the development of inner and private voices in the L2 as they do not allow time for thought, do not offer any problems to think about and they focus the learner's attention on correct forms of the public voice. Such exercises can be especially damaging if they present all their prompts in complete and overtly grammatical sentences and require learners to respond with such sentences too.

Also damaging to the development of an L2 inner voice are premature reading activities in which the learners are forced to focus all their processing energy on the low level linguistic decoding of a short and empty text because they have not yet achieved the lexical threshold level which allows beginning L1 readers to respond to the meaning as well as to the words and because the discrete-item comprehension questions force a focus on the linguistic code of the public voice. Postponing reading until a substantial vocabulary has been acquired can facilitate the development of an L2 inner voice because the voice which has been developing during meaningful listening activities and problem solving tasks can then be used to help achieve multidimensional representation of reading texts in which a lot of the language can be automatically processed (Tomlinson, 1997). This is especially so if the reading activities involve mainly experiential rather than studial reading and if the teacher encourages intake responses (i.e., the learners' responses to their representation of the text) rather than imposes input response tasks (in which the learners are made to focus on what the writer says and how he/she says it).

However, there is not much point in encouraging learners to respond to reading texts with their inner voice if there is nothing in the texts worth responding to. In my recent analysis of nine popular elementary level EFL coursebooks, I found that all the texts were short, explicit, neutral, bland and non-provocative in a way that the texts we read in the real world never are. There was no need for the reader to fire sensory or affective connections or to think about issues or implications with the inner voice. Low level linguistic decoding was all that was necessary to comprehend the texts. Wajnryb (1996) also recently analyzed popular EFL coursebooks and concluded that they portrayed a world which was "safe, clean, harmonious, benevolent, undisturbed and PG-rated", which lacked "jeopardy, face threat, negotiation implicature (or implied meaning)" and in which meaning was "explicit and context-independent" (p. 291). Wajnryb quite rightly calls for the introduction of much more "jeopardy" in the texts of the EFL coursebook. She does so in order that we can prepare learners for the real world and can empower them to operate effectively in real communication. I would do so also so that we can encourage L2 learners to develop an inner voice which they can use with their affective impulses and their sensory images to respond to stimulating and provocative texts in the L2.

Learner use of the L1 in the L2 classroom has been discouraged by most methodologists for a long time on the grounds that the more practice the learners get in using the L2 the better. This apparently logical advice, however, has led to situations in which lower level learners are extremely restricted because they do not yet have the language to develop and express ideas and opinions nor to project themselves as intelligent, creative human beings. All they can do is to imitate models, to decode simplistic texts and to manipulate the de-contextualized language of drills. Their representation of the L2 world is almost entirely linguistic and it lacks the multidimensional richness and variety of their L1 representation of the world. And in some classrooms learners who express themselves in the L1 are punished by teachers who have been told to insist on the L2 at all times. This narrow and negative experience of the L2 world diminishes many learners, demotivates them and prevents them from ever achieving communicative competence in the L2. However many methodologists have begun to recognize the dangers of insisting on the exclusive use of the L2 and they are beginning to suggest greater tolerance of L1 use (e.g., Edge, 1993; Willis, 1996; Swain, 1998). I would go much further and suggest that in some activities the use of the L1 should be positively encouraged so that the learners can respond intelligently to what they read and listen to and so that they can generate interesting content before they speak or write. If they are encouraged to use their L1 in response and preparation activities they are likely to use their L1 inner voices too and thus to fire the connections which will achieve the multidimensional representation necessary for meaningful processing and production of the L2. If they are forced to only use the L2 they will devote all their processing energy to producing correct L2 public speech and they will be unlikely to achieve meaningful representation at all.

I once "taught" speaking skills at Kobe University and I encouraged the students to use Japanese for at least two thirds of each lesson (even though I continued to use only English all the time). During that time they responded to English texts in Japanese, they developed ideas from the texts in Japanese, and they communicated their ideas to others in Japanese. Then they talked about their ideas in English to each other, to me, and to the class. They achieved a level of intelligent communication in English which some of their other teachers had thought impossible. Of course, ultimately the learners need to develop an inner voice in the L2 so, in addition to L1 thinking and discussion activities, they need activities in which they are first of all encouraged to think in an L2 inner voice and then to use an L2 private voice whilst taking part in problem solving activities. The aim is to make sure that the learners always use an inner voice and to help them to progress from exclusive use of an L1 inner voice, an L1 private voice and an L1 public voice to a stage in which they are able and willing to code switch between L1 and L2 in their inner, private, and public voices and eventually, for some of them, to a stage in which they are proficient users of L2 inner, private, and public voices.

Inner Voice Activities

In conclusion, I would like to suggest some inner-voice activities which can be done in class or for homework to help learners to develop an inner L2 voice which can help them to achieve confidence and creativity and to prepare for accurate, appropriate, and effective use of their L2 inner voice.

Stage 1

1. Learners listen to dramatic readings of L2 stories by the teacher (e.g., with gestures, sound effects, and visuals) and then do L1 inner-voice activities (e.g., "Talk to yourself about why you think the old man knocked on all the doors.") before taking part in L1 discussions of the story.

2. Learners take part in TPR activities (Asher, 1977, 1994; Tomlinson, 1990, 1994) in which they are given time to think in their inner voices before they follow simple L2 instructions given to them by their teacher.

3. Learners take part in TPR Plus activities (Tomlinson, 1990, 1994) in which they act out stories, events, processes etc. narrated to them by their teacher and then try to recall what happened mentally before retelling it in the L1.

Stage 2

1. Learners listen to dramatic readings of stories by the teacher, then do L1 inner voice activities before taking part in L1 discussions of the story. Then they try to continue the story in their heads in the L2 before trying to tell each other their story endings in the L2.

2. Learners take part in TPR activities in which they are given time to think in their inner voices before they follow L2 instructions.

3. Learners take part in TMR (Total Mental Response) activities in which the teacher instructs them in the L2 to form mental images and to discuss issues and problems with their inner voices. Then they discuss their mental experiences with each other. The inner voice and the group discussions will be primarily in the L1 but the teacher can encourage the use of some L2 words.

4. The learners are encouraged to read along in their heads as the teacher reads emotive texts aloud. Then there are intake response activities in which the learners think about and then discuss their responses to what they have "read."

5. The learners take part in problem solving activities in which they are encouraged to use their L2 private voices aloud individually, then in pairs and then in groups.

Stage 3

1. Learners listen to dramatic readings of stories by the teacher, then do L2 inner voice activities before taking part in L2 discussions of the story. Then they try to continue the story in their heads in the L2 before taking part in a group story writing activity.

2. Learners take part in TPR activities in which they are given time to

think in their inner voices before they follow complex L2 instructions.

3. Learners take part in TMR (Total Mental Response) activities in which the teacher instructs them in the L2 to form mental images and to discuss issues and problems with their inner voices. Then they discuss their mental experiences with each other in the L2 before using them as the basis for an L2 writing activity.

4. The learners do extensive reading activities in which they read texts of their choice. There are no tasks but the learners are encouraged to talk to themselves as they read and to do visual/verbal mental summaries and predictions at the end of sections of the text.

5. The learners do experiential reading activities in which pre-reading connection activities, whilst-reading think activities and post-reading intake response activities are used to stimulate the use of the inner voice.

6. Learners in groups prepare to perform readings of extracts from texts they have already read silently and enjoyed.

7. The learners take part in problem solving activities in which they are encouraged to use their private voices aloud individually, then in pairs and then in groups. They then report their solutions in a public voice.

Obviously the activities suggested above would not be suitable in all second and foreign language contexts. But locally suitable mental response activities involving the development of an L2 inner voice can be fairly easily designed by teachers once they grasp the importance of the inner voice. By doing such activities the learners can gain the confidence, the self-esteem and the communicative competence which can come from effective use of the inner voice. Such activities are rarely advocated in TEFL methodology and are not used in coursebooks. However, inner voice activities are used in Neuro Linguistic Programming (NLP) and in Suggestopedia, silent activities have been used by Paustovsky in his application of the Silent Method and examples of mental response activities can be found in Sion (1995), Underhill (1996) and Tuzi (1998).

Conclusion

Inevitably many of the points I make in this article are speculative and are intended to stimulate discussion and research. There has not been enough conclusive research yet to prove the claims about the crucial role of the inner voice which I am making for L2 learning. We need to try to find out much more about why and how we use the inner voice in the L1 and about the differences between inner voice use in L1 and in an L2. In particular we need to find out much more about how an L2 inner voice develops (or does not develop) in both natural and formal L2 acquisition, how teachers, learning materials and fellow learners typically influence this process and how L1 and L2 inner voices interact with each other. We also need to find out how we can help learners of an L2 to make use of their L1 inner voice in L2 learning and communication and how we can help them to develop an effective L2 inner voice. However, our

current lack of verifiable knowledge about the L2 inner voice should not prevent us from experimenting with ways of trying to influence its development. Helping learners to talk to themselves during L2 learning and communication can certainly help them to reduce anxiety and to gain confidence and control. It can probably help them to understand and communicate more and to develop greater communicative competence too.

References

Anderson, J. R. (1995). *Learning and memory. An integrated approach*. New York: John Wiley and Sons.

Appel, G. & Lantolf, J. P. (1994). *Speaking as mediation: A study of L1 and L2 text recall tasks. The Modern Language Journal.* vol. *78*(4), 437-452.

Asher, J. F. (1977). *Learning another language through actions*. Los Gatos, CA: Sky Oaks.

Asher, J. (1994, Autumn). *The Total Physical Response: A stress-free, brain compatible approach to learning*. SEAL.

Ausubel, D. P., Sullivan, E. V., & Ives, S.W. (1980). *Theory and problems of child development* (3rd ed.) NY: Grune and Stratton.

Berk, L. E., & Diaz, R. M. (Eds.) (1992). *Private speech: From social interaction to self-regulation.* Hillsdale, NJ: Lawrence Erlbaum.

Bernstein, B. (1971). *In class, codes and control: Vol. 1. Theoretical studies towards a sociology of language.* London: Routledge and Kegan Paul.

Binet, A. (1903). *L'etude experimental de l'intelligence.* Paris.

Blonskii, P. P. (1964). *Memory and thought. In Selected works on psychology*. Moscow: Prosveshchenie Press.

Carter, R., & McCarthy, M. (1995). *Grammar and the spoken language. Applied Linguistics. 16*(2), 141-158.

Cleland, D. L. (1971) Vocalism in silent reading: Vol. 2. Visible Language, 145-157.

Dulay, H., Burt, M., & Krashen, S. (1982). *Language two*. New York: Oxford University Press.

Edfelt, A. W. (1960). *Silent speech and silent reading.* Chicago: University of Chicago Press.

Edge, J. (1993). *Essentials of English language teaching*. London: Longman.

Egger, V. (1881). *La Parole Interieure.* Paris: Libraire Germer Bailliere et Cie.

Frawley, W. (1992, August). *The cross-language study of private speech.* Paper Presented at the Conference for Socio-Cultural Research, Symposium on Private Speech and Self-Regulation. Madrid.

Frawley, W., & Lantolf, J. P. (1985). *Second language discourse: A Vygotskian perspective. Applied Linguistics. 6*, 19-44.

Gattetgno, C. (1963). *Teaching foreign languages in schools.* Reading: Educational Explorers.

Gathercole, S. E., & Baddeley, A. D. (1993). *Working memory and language*. Hove: Lawrence Erlbaum Associates.

Geschwind,N. (1990). Specialisations of the human brain. In R. R. Llinas (Ed.), *The workings of the brain: development, memory and perception.* New York: W. H. Freeman.

de Guerro, M. C. M. (1994). Form and functions of inner speech in adult second language learning. In J. P. Lantolf & G. Appel (Eds.), *Vygotskian approaches to second language research.* (pp.83-116.) Norwood, NJ: Ablex.

Hardyck, C. D. (1968). *The effect of subvocal speech on reading.* Arlington, VA: (ERIC Document Reproduction Service No. ED 022 656).

Jacobs, B., & Schumann, J. (1992). *Language acquisition and the neurosciences: Towards a more integrative perspective. Applied Linguistics.* 13(3), 282- 301.

Jacobson, E. (1911). *On meaning understanding. American Journal of Psychology. 22.*

Jacobson, E. (1931). *Electrical measurement of neuromuscular states during mental activities. VII. Imagination, recollection and abstract thinking involving the speech musculature. American Journal of Physiology.* 97(1).

Klein, E. S. (1981). *Inner speech cue preference in reading disabled and normal children.* Ann Arbor: University Microfilms International.

Kosslyn, S. M., Behrmann, M., & Jeannerod, M. (1995). *The cognitive neuroscience of mental imagery. Neuropsychologia. 33(11.)* 1335-1344.

Lantolf, J. P., & Appel, G. (Eds.). (1994). *Vygotskian approaches to second language research.* Norwood, NJ: Ablex.

Lantolf, J. P., & Pavlenko, A. (1995). *Sociocultural theory and second language acquisition. Annual Review of Applied Linguistics. 15*, 108-124.

Mandel, D, R., Jusczyk, P. W., & Kemler Nelson, D. G. (1994). Does sentential prosody help infants organize and remember speech information ? *Cognition. 53*, 155-180.

Masuhara, H. (1998). Factors influencing the reading difficulties of advanced learners of English when reading authentic texts. Unpublished Ph.D. Thesis. University of Luton.

McCafferty, S. G. (1994a). The use of private speech by adult ESL learners at different levels of proficiency. In J. P. Lantolf & G. Appel (Eds.), *Vygotskian approaches to second language research,* (pp. 117-134.) Norwood, NJ: Ablex.

McCafferty, S. G. (1994b). *Adult second language learners' use of private speech: A review of studies. The Modern Language Journal. 78(*4), 421-436.

McCafferty, S. G. (1998). Nonverbal expression and L2 private speech. *Applied Linguistics. 19*(1), 73-96.

McGuigan, F. J. (1964). *Silent speech during silent reading.* Arlington, VA: (ERIC Document Reproduction Service No. ED 003 312).

Minghella, A. (1998, April 19). The film of the book. *The Observer Review.*

Nuttall, C. (1996). *Teaching reading skills in a foreign language.* Oxford: Heinemann.

O'Malley, M. J., & Chalot A. U. (1990). *Learning strategies in second language acquisition.* Cambridge: Cambridge University Press.

Pinker, S. (1994). *The language instinct.* London: Penguin.

Potebnya, A. A. (1926). *Collected works, Vol. 1. Thought and language.* Ukrainian State Press.

Rosenblatt, L. M. (1994). *The transactional theory of reading and writing*. In R. B. Ruddell, M. R. Ruddell, & H. Singer (Eds.), *Theoretical models and processes of reading* (4th ed.). Newark, Delaware: International Reading Association. 1057-1092.

Saville-Troike, M. (1988). Private speech: Evidence for second language learning strategies during the "Silent Period". *Journal of Child Language, 15*, 567-590.

Sadoski, M., & Paivio, A. (1994). A dual coding view of imagery and verbal processes in reading comprehension. In R. B. Ruddell, M. R. Ruddell, & H. Singer (Eds.), *Theoretical models and processes of reading* (4th ed). Newark, Delaware: International Reading Association. 582-601.

Sion, C. (1995). *Talking to yourself in English: An alternative approach to self-study - (Vols 1 & 2*). Heerlen, Netherlands: Training Etcetera.

Sokolov, A. N. (1972). *Inner speech and thought.* New York: Plenum Press.

Stevick, E. (1986). *Images and options in the language classroom.* Cambridge: Cambridge University Press.

Swain, M. (1998). *Integrating language and content teaching through collaborative tasks*. RELC Annual Seminar, Singapore.

Tomlinson, B. (1990). *Managing change in Indonesian high schools. ELT Journal. 44*(1).

Tomlinson, B. (1994). TPR materials. *FOLIO.* 1(2), 8-10.

Tomlinson, B. (1996). Helping L2 readers to see. In T. Hickey & J. Williams. (Eds.) *Language, education and society in a changing world*. Clevedon, Avon: Multilingual Matters.

Tomlinson, B. (1997). *The role of visualization in the reading of literature by learners of a foreign language. Unpublished Ph.D. Thesis.* University of Nottingham.

Tomlinson, B. (1998a). Seeing what they mean: Helping L2 readers to visualise. In B. Tomlinson (Ed.), *Materials development in language teaching.* Cambridge: Cambridge University Press.

Trojano, L., Chiacchio, L., Cusati, A., Filla, A. & Grossi, A., (1992). Articulatory loop in ataxtic dysarthia. *Journal of Neurolinguistics*. *7*(1/2), 115-131.

Tuzi, F. (1998, February - March). The inner workbench in the EFL classroom. *IATEFL Newsletter, 7*(1 8 2).

Underhill, A. (1996). Using the inner workbench to enrich learning. JALT Convention, Hiroshima, Japan.

Updike, J. (1994). *Brazil*. London: Hamish Hamilton.

Ushakova, T. N. (1994). *Inner speech and second language acquisition: An experimental-theoretical approach.* In J. P. Lantolf, & G. Appel (Eds.) *Vygotskian approaches to second language research.(pp.135-156)*. Norwood, NJ: Ablex.

Vygotsky, L. S. (1956). *Thought and language.* In *Selected Psychological investigations.* Academic Pedagogy of Science, Moscow: RSFSR Press.

Vygotsky, L. S. (1986). *Thought and language.* Cambridge: MIT Press.
Willis, J. (1996). *A framework for task-based learning.* Harlow: Longman.
Wajnryb, R. (1996). *Death, taxes and jeopardy: Systematic omissions in EFL texts, or life was never meant to be an adjacency pair.* ELICOS Association, 9th Educational Conference, Sydney.

Author

BRIAN TOMLINSON, Senior Fellow, the National University of Singapore and the Founder and President of MATSDA (the Materials Development Association). Specializations: FL teacher training, curriculum development.

Applied Language Learning
2000, Vol. 11, No. 1, pp. 155-176

Nonverbal Accommodations in Foreign Language Teacher Talk

Linda Quinn Allen
University of Missouri-St. Louis

Foreign language (FL) teachers who use the FL as the language of instruction typically make both verbal and nonverbal accommodations to facilitate learners' comprehension of the language. Although verbal accommodations have been extensively examined, nonverbal accommodations have not received equal scrutiny. Drawing on research from the field of communication this article proposes a framework which identifies, classifies, and organizes FL teachers' nonverbal behavior. The article describes an observational study in which each nonverbal behavior in the framework is defined and illustrated as it occurs in a FL class. Pedagogical implications for the framework and a research agenda for continued study of FL teachers' nonverbal behavior are suggested.

It is a commonly held belief that comprehensible input is essential to the acquisition of language. In classroom settings where a foreign language (FL) is the language of instruction, teacher talk, "the language of classroom management and explanation" (Krashen & Terrell, 1983, p. 34), is the richest source of comprehensible input. Hatch (1983, pp. 66) and Omaggio Hadley (1993, p. 175) define teacher talk as plurimodal, consisting of both verbal and nonverbal accommodations. The verbal mode of teacher talk has been extensively examined. Research, summarized in Hatch (1983, p. 66-67), indicates specific verbal accommodations which promote comprehension and/or language learning, including: speech rate, vocabulary, syntax, discourse, and speech setting. Although 82% of all teacher's communications are nonverbal (Kellogg & Lawson, 1993, p. 2), virtually no empirical studies have been conducted which systematically examine how FL teachers use nonverbal behaviors in ways that enhance comprehension of FL input. Just as the various constituents of the verbal component of teacher talk have been identified, classified, analyzed, and subjected to scientific rigor, so too must the complementary constituents of the nonverbal component.

This article proposes a framework, based on research conducted in the field of communication, by which nonverbal FL teacher talk can be identified, classified, and organized. The framework identifies specific nonverbal behaviors, thus providing a common terminology which is needed before we can engage in any meaningful analysis or conduct empirical studies to test the effectiveness of specific nonverbal accommodations. The article describes an observational study in which the framework was operationalized for use in studies in foreign language classes. Pedagogical implications involving the framework and a research agenda for an ongoing examination of nonverbal FL teacher talk are also suggested.

Literature Review

Wing (1987) identifies teacher talk as "a critical variable of significant importance and complexity" and maintains that "a systematic investigation of how teachers function...is necessary for an understanding of how learning occurs in foreign language classes" (p. 159). However, systematic observational studies conducted in FL classes over the past three decades have focused almost exclusively on verbal behavior. One noteworthy exception is a participant observational study by Ward and von Raffler-Engel (1980) who videotaped twelve class sessions of a college instructor of German in order to examine his nonverbal interaction with his students. The researchers found a direct relationship, or "kinesic synchrony" (p. 289), between the teacher's nonverbal behavior and that of the students.

Moskowitz (1976) found, in an interaction-analysis study in which she used her self-designed FLint system, that outstanding FL teachers exhibit more nonverbal behaviors than do typical FL teachers. Two other FL observational studies, based on adaptations of the Flanders System (Flanders, 1970), included head nodding, the vocalic emblem "uh-huh," and silence as nonverbal behaviors (Wragg, 1970; Rothfarb, 1970). Jarvis (1968) devised and implemented an observational instrument which included silence. More recently, Dobbs (1995) suggested a twelve-point checklist with which teachers may analyze their own videotaped discourse. Included in the checklist are silence, body language used to illustrate meaning, and negative voice qualities. Thornbury (1996) established a typology of communicative classroom discourse which included wait-time. Four observational studies conducted in adult ESL classes included: (1) nonverbal signals which may indicate a turn change (VanLier, 1984); (2) nonverbal behavior as an indication of student confusion, and teacher vocalics of speaking louder, more slowly, and falling intonation (Dinsmore, 1985); (3) vocalic tempo and intonation patterns (Ulichny, 1996); and (4) periods of silence lasting two or more seconds (Mora, 1995).

The focus of all the studies cited in the previous paragraphs was either primarily on verbal behavior with incidental notations of discrete nonverbal behavior or on vocalics, one specific category of nonverbal behavior. The fundamental difference between the study described in this article and previous FL observational studies is that the focus of the present study is

exclusively on nonverbal teacher talk and includes all the categories of nonverbal behavior suggested by researchers in the field of communication. The primary questions the study sought to answer were: (1) Can a FL teacher's nonverbal teacher talk be classified according to the framework suggested by researchers in the field of communication? (2) What do nonverbal behaviors used in FL teacher talk look like? and (3) What are the students' perceptions of the teacher's nonverbal behaviors as an aid to comprehension of FL input?

Method

Answers to the research questions cited in the preceding paragraph were sought through the method of observational analysis, one of the three fundamental techniques that form the core of qualitative research. Observation, according to Marshall and Rossman (1989), "entails the systematic description of events, behaviors, and artifacts in the social setting chosen for the study" (p. 79). In order for the research findings to yield the quality, the in-depth analysis, and the "thick description" (Marshall & Rossman, 1989, p. 19) required for qualitative inquiry, one teacher was selected for observation.

Rationale for Selection of the Site and Teacher

Marshall and Rossman (1989) describe four criteria for choosing the ideal site: "(1) entry is possible, (2) there is a high probability that a rich mix of many of the processes...that may be a part of the research question will be present, (3) the researcher can devise an appropriate role to maintain continuity of presence for as long as necessary, and (4) data quality and credibility of the study are reasonably assured by avoiding poor sampling decisions" (p. 54). Based on these criteria and the nature of my research questions, I needed to find a teacher who: (1) used the FL extensively as the language of instruction, (2) naturally exhibited nonverbal behavior as part of her teaching style, (3) would not be ill at ease at being videotaped, and (4) taught in a school which would allow me to conduct the study.

Mark, a student in my university FL methods course, brought a teacher, whom I shall refer to as Mrs. Keifer, to my attention. Mark had visited Mrs. Keifer as part of an assignment for the methods course. Even though I had not mentioned to the methods class that I was planning a study on nonverbal teacher talk, the description Mark gave of Mrs. Keifer in his report included the first two criteria mentioned in the preceding paragraph. I subsequently visited Mrs. Keifer's class and concluded that she would provide a rich source of nonverbal behavior needed for my study. Mrs. Keifer graciously agreed to participate in my study and assisted me in obtaining the principal's permission.

I first visited Mrs. Keifer's class during the spring semester 1997. We agreed that when the fall semester 1997 was well underway, she would choose the class she felt would find my presence and the videocamera least intrusive. A few weeks into the fall semester, I sat in on two of the classes Mrs. Keifer had chosen. Both classes were second year Spanish. Mrs. Keifer taught both

classes in Spanish and used a great deal of nonverbal teacher talk. I chose the class that met at the time which best fit into my schedule. Mrs. Keifer and I agreed that I would come back on the following Tuesday and do the first videorecording. I returned each Tuesday for the next five weeks.

Role of the Researcher

Patton (1990, p. 217) identifies five primary dimensions in approaches to observation: (1) role of the observer, (2) portrayal of the observer's role to others, (3) portrayal of the purpose of the observation to others, (4) duration of the observations, and (5) focus of the observation. Each dimension, as it relates to the present study, is discussed in the following paragraphs. Following Wolcott's (1990) suggestion, "because the researcher's role is ordinarily such an integral part of qualitative study" (p. 19), the description of the study is written in first person.

My role as the researcher was that of an onlooker and technician. My purpose in being in the classroom was to observe, not to evaluate or participate in the instructional activities, and to videotape each of the observations so that I could later study the teacher's nonverbal behavior in depth. According to VanLier (1988), videorecordings are useful not only as a mnemonic device, but also as an "estrangement tool" (p. 2). Since so many things are going on simultaneously in a setting which is familiar to the researcher, the videorecordings allow the researcher to look at the classroom observations with detachment. Because the students saw the videocamera when they entered the classroom, my presence could definitely be considered overt.

In the initial conversations I had with the teacher several months before beginning the observations, and in a letter to the students and parents, I had said that I was interested in studying strategies of teaching a foreign language. At the time of the first observation, the teacher introduced me to the students and told them that I wanted to see "what goes on in here". I had not specifically mentioned nonverbal behavior because "the point of using qualitative methods is to understand naturally occurring phenomena in their naturally occurring stages" (Patton 1990, p. 41); I didn't want to bias the teacher's normal behavior in any way.

In all, I videotaped six fifty-five minute classes. At the end of the sixth observation, the teacher invited me back to observe a couple more classes. I believed, however, that the six classes I had already videotaped would provide sufficient data to answer the research questions. Since the research questions specifically addressed the nonverbal behavior of the teacher, the focus of the observations was entirely on the teacher. I followed her action, rotating the videocamera to keep her in view, as she moved about the classroom. The six videotapes provided the data for analysis.

Procedure for Data Analysis

My procedure in analyzing the data involved four steps. First, I made a written transcription of the verbal teacher talk. Then I replayed the portions of the videorecordings that were rich in nonverbal teacher talk and inserted descriptions of the nonverbal behavior in the transcription.

For the third step of the data analysis, I coded the nonverbal behavior according to a framework based on Burgoon, Buller, and Woodall's (1989) classification of nonverbal behaviors. These seven categories of nonverbal behavior are listed and briefly defined in Table 1. Each category is described in further detail, along with a few salient examples of each type of nonverbal behavior, in the findings section.

As the final step in the data analysis, I grouped all examples of nonverbal behavior in the transcription by category. The purpose of this step was to facilitate the discussion of Mrs. Keifer's nonverbal behavior. It is important to bear in mind, however, that verbal and nonverbal behaviors are "complementary constituents of the whole process of interaction" (Kirch, 1979, p. 423). In any given segment of instruction, Mrs. Keifer's verbal teacher talk and her nonverbal teacher talk worked in tandem to convey meaning. In addition, as the following discussion illustrates, she often used a combination of several nonverbal behaviors along with the simultaneous verbal teacher talk.

Findings

Emblems

Following Ekman and Friesen (1969), Burgoon, Buller, and Woodall (1989) divide kinesics, the broadest category of nonverbal behavior, into five behaviors. Emblems, the first of the five behaviors, are culture-specific in that their meaning is usually understood by all members of a group, class, or culture, even when they are displayed out of context. Most North Americans, for example, would correctly interpret the "T" for time-out and the "O.K." made with the circled thumb and index finger even when these emblems are viewed in isolation from any verbal context. Emblems have a one or two word, or in some cases, a phrase translation, and they are used with or without words to repeat, substitute, or contradict some part of the verbal message. Pointing to one's eye, in some Hispanic cultures, for example, clearly expresses the warning, "Watch out!" even without the accompanying verbal message, "¡Ojo!" Emblems are most often used to purposely express a specific message in situations where conversation is difficult because of noise or distance. A French woman may, for example, from across a crowded, noisy room, indicate to her spouse that she is ready to leave a social gathering by tapping the back of her left hand with her right while slightly lifting her left hand.

I observed Mrs. Keifer using seven different emblems at various times. To indicate "más o menos" she rotated her hand back and forth as if turning a door knob. She cupped her hand behind her ear to indicate that she did not

hear what a student said. She gave a thumbs up encouragement to a student who had given a correct response. She also used the thumbs up emblem when describing a map she had made. The emblem replaced the words "It's okay," to complete the sentence, "No es un mapa muy bueno pero..." During a vocabulary review, Mrs. Keifer explained the word "aburrido" with an exaggerated yawn. I observed Mrs. Keifer using an emblem that expresses a small amount by extending the index finger horizontally over the thumb when she said, "Hay un problema," and another time with "las montañas peque ñitas." At one point, she rubbed her fingers and thumb of one hand while saying, "Enrique tiene mucho dinero." She indicated she did not know why a student had given a certain response, saying, "¿Por qué?" and briefly touching her temples and then shrugging her shoulders as she lifted her hands up and away from her body.

Illustrators

Illustrators, the second behavior in the category of kinesics, are typically performed with the hands and arms and have been described by Riseborough (1981, p. 173) as "gestural onomatopoeia" because they are directly interrelated with the simultaneously expressed verbal message. Illustrators help the speaker describe what is being said, trace the direction of speech, set the rhythm of speech, and gain and hold a listener's attention (Burgoon, Buller, and Woodall, 1989, p. 44). Ekman (1980, p. 98) has identified eight specific types of illustrators in terms of how they relate to simultaneous speech. They are listed and defined in Table 1.

Table 1. Seven Categories of Nonverbal Behavior

Kinesics (Body movements)	
Emblems:	Symbolic movements specific to a culture used to repeat, replace, or contradict the verbal message.
Illustrators (Movements which illustrate the accompanying verbal message)	
Batons:*	Accent or emphasize a particular word or phrase.
Underliners:*	Emphasize a phrase, clause, sentence, or group of sentences.
Ideographs:*	Sketch the path or direction of thought.
Rhythmics:*	Depict the rhythm or pacing of an event.
Kinetographs:	Depict a bodily action or a non-human action.
Pictographs:	Draw the shape of the referent in the air.
Spatials:	Depict a spatial relationship.
Deictics:	Point to the referent.
Affect Displays (Movements-especially facial expressions-which	

reveal emotions)	
Regulators (Movements used to manage or pace the flow of speaking and listening between two or more interactants)	
Adaptors (Private behaviors people perform to satisfy physical or psychological needs)	
Self-Adaptors:	Movements one does to oneself to satisfy ones' needs (i.e. scratching one's arms, licking one's lips, wiping one's mouth, smoothing one's clothing)
Alter-Adaptors:*	Movements related to contact with another person (i.e. crossing on'e arms when talking to someone with whom one is uncomfortable)
Object-Adaptors:*	Movements involved in manipulating obects in the environment (i.e. tapping a pencil, jiggling a piece of chalk, playing with a rubber band)
Physical Appearance (Natural features such as body shape, facial structure, skin color, hair texture, and adornment features such as clothing jewelry, and make-up.)	
Haptics (Touch used to communicate meaning.)	
Proxemics (Space used to communicate meaning.)	
Chronemics (Time used to communicate meaning.)	
Vocalics (Any vocal/auditory behavior excluding the spoken word and including pitch, volume, silence, laughter, sighs, and coughs.)	
Artifacts (Physical objects used to communicate meaning.)	

**Based on Burgoon et al. (1989) and Ekman (1980).*

The first four illustrators listed in the table, batons, underliners, ideographs, and rhythmics, do not convey meaning in and of themselves. In analyzing the six videotapes, I did not observe any ideographs or rhythmics. However, Mrs. Keifer constantly used batons and underliners to the extent that it was difficult to determine where one stopped and the next one began. The last four illustrators listed in the table, kinetographs, pictographs, spatials, and deictics, can convey meaning, and were used quite frequently by Mrs. Keifer. The following subsections provide some specific examples of her illustrators.

Batons and Underliners

Batons accent a particular word or phrase and underliners emphasize longer groups of words such as clauses, sentences, or groups of sentences. They are always used simultaneously with verbal behavior and do not normally convey meaning in and of themselves. For example, on three occasions, Mrs. Keifer tapped her temple to illustrate the verbs, *¿Ustedes saben?, ¿Ustedes no recuerdan?,* and *¿Cómo sabemos que es la abuela?* While explaining the significance of the date September 17, she wagged her index finger quickly back and forth as she said, *¡Es un día muy importante mañana!* When responding to a student's correct answer, she said *¡Exacto!* and struck her open right palm with the side of her left hand. She made a "t" by crossing two fingers to illustrate that sound in the word "ecuatoriano". Another example of a baton is when Mrs. Keifer emphasized the word "no" by pushing outward with both hands as she asked, *¿Cuál es la parte de tu cuerpo que no, no te gusta?*

Kinetographs

The next type of illustrator, kinetographs, has been defined by Ekman (1980) as a depiction of a human or nonhuman action. I coded Mrs. Keifer's nonverbal behavior as a kinetograph when she mimed various acts that people perform. For example, in giving students directions, she mimed opening a book by putting both palms of her hands together then spreading them out as she said, *Abran los libros a la primera sección de vocabulario.* She did the inverse action, bringing the palms of both hands together as she said, *Por favor, cierren*, when she wanted the students to close their books.

Mrs. Keifer often used kinetographs to illustrate the meaning of target verbs. She mimed playing a guitar (*tocar*), eating (*comer*), drinking *(beber*), finding and picking something up off the floor (*encontrar*), dancing (*bailar*), sleeping (*dormir*), and looking (*buscar*). She illustrated the meaning of *Mamá está sentada* by sitting down, and *barrer* by taking a broom from a closet and sweeping. To illustrate the adjective *débil* she assumed a slumped position and dropped her arm from a raised to a lowered position. She put her flat hand over her eyes and turned her head slowly from side to side to illustrate the interrogative *¿Dónde?* She illustrated the meaning of the word *rascacielos* by scratching the back of two students then reaching high and scratching the air.

There were times, as the following three examples illustrate, when Mrs. Keifer's use of kinetographs involved quite a bit of animation. In the first example, she wanted to convey the meaning of the word *llevar*. *¿Ustedes llevan los almuerzos?* (mimed picking up something with both hands). *¿Ustedes comen en la cafetería?* (mimed eating). *¿Tú no comes en la cafetería? Entonces...* (took an open brown lunch bag, rolled the top over, and carried it halfway across the room). *¿Tú no comes? Roberto no come en la cafetería porque no le gusta la comida. Entonces...el chico tiene hambre...Entonces...*(went back over to her desk and pretended to pack a lunch in the brown lunch bag). *Mamá prepara el almuerzo. Y entonces él...*(started walking with the bag), *...saca, lleva el almuerzo.*

In the following example Mrs. Keifer was trying to elicit the word for "traveler's check". *Los cheques...los cheques...Recuerden la fotografía del hombre...*(pointed toward the bulletin board where the picture of a man carrying his suitcases used to be). *El hombre. Es un cheque de...Recuerden la fotografía. Recuerden la fotografía en la tablilla de un hombre que tiene las maletas?* (mimed carrying suitcases). *Y el viajero. Ahora, un cheque de viajero. ¡Qué bien! ¡Qué bien! El verbo es viajar. Los cheques...los cheques de viajero.*

Perhaps the most involved use of kinetographs that I observed was when Mrs. Keifer explained reflexive verbs. She had written four pairs of verbs on the board: *bañar/bañarse, lavar/lavarse, duchar/ducharse, limpiar/limpiarse. Yo estoy en mi casa. No estoy en la escuela. Hay un baño. Está allá. Sí, cerca. Sí, el baño. El baño en mi casa. Sí. Sí. Y yo me baño y yo me lavo,* (mimed washing arms). *Y yo me lavo*, (mimed washing her face). *Sí, lavar, bañar, duchar, sí. Todos los verbos. Ducharse, lavarse, bañarse. Esos son los verbos reflexivos. Hernandez dice que todos los verbos son regulares. Yo limpio,* (picked up a cloth and dusted the desk with it). *Me limpio,* (mimed washing herself with the cloth). *Lavo. Lavo la ropa,* (pretended to be washing something by dipping it in a tub of water). *Me lavo,* (mimed washing herself). *Baño. Baño al bebé. Aquí está mi bebé?* (picked up a doll and pretended to bathe it). *Sí , baño al bebé. Si', baño al bebé. Me baño,* (washed arms). *Me ducho,* (lifted up arms as if showering). *Lavo. Lavo el pelo*, (went over to a female student and pretended to wash the student's hair). *Me lavo el pelo*, (pretended to wash her own hair). *Le quito los zapatos*, (went over to a male student and took his shoe off). *Yo me quito el zapato,* (took her own shoe off). *Me pongo,* (put the student's shoe on her own foot). *Me quito,* (took the student's shoe off her own foot). *Me pongo*, (put her own shoe back on). *Yo le pongo el zapato,* (went back over to the student and put his shoe back on his foot). *Bueno. Lavar. Lavar. Lavo, lavo a la chica,* (rubbed a female student's back as if bathing her). *Me lavo.* (pretended to wash herself).

Pictographs

When people draw an imaginary picture of a word in the air, they are using pictographs. Mrs. Keifer used pictographs less frequently than kinetographs. Most of the pictographs I observed illustrated vocabulary words. For example, to illustrate "El pelo es rizado," Mrs. Keifer drew fast little circles in the air surrounding her head. To illustrate the word "lacio," she moved her palm horizontally along a flat line about waist high, and then also drew a straight line with a stiff hand down the length of her body. She drew imaginary waves in the air to illustrate *ondulado*. She later used the same pictograph to illustrate the word *el agua.* While saying, *Los personas del mundo* she sketched a round circle in the air with both hands. She sketched a square in the air to illustrate a room while saying, *La sala es bonita*. She drew a star in the air when she said, *En la fotografía la actriz es una estrella de televisión.*

Spatials

Mrs. Keifer used spatials, illustrators that depict a spatial relationship, infrequently in the six classes I observed. In illustrating the meaning of the words *la altura* and *alto* she used the same spatial, raising her hand with a flat palm over her head. To illustrate *es baja*, she bent at the knees to make herself shorter. Mrs. Keifer brought her arms in and out at waist height to illustrate the word *mediano*. To indicate directions for *¿Está al norte de los Estados Unidos?* she pointed up with her finger and for *a sur, en America central* and *America del sur*, she pointed down with her finger.

Deictics

The last type of illustrator identified by Ekman (1980) is deictics, illustrators used to point out a referent. Mrs. Keifer frequently used deictics to point to people or objects to which she referred verbally. In a vocabulary lesson on nationalities, Mrs. Keifer pointed to herself and to a map while saying, *Yo soy una persona de Méjico* in order to elicit the word *mejicana*. She also pointed to different countries on the map to review the names of those countries. Another example is from a lesson on verbs like *gustar, detestar, encontrar, y fascinar* with object pronouns. Mrs. Keifer held a basketball and pointed to an individual student while saying, *él, él* in order to elicit the response, *El detesta el básquetbol*.

Mrs. Keifer began the fifth class I videotaped with a review of body vocabulary. At first, she asked students, for example, *Muéstrame la nariz*, and pointed to her nose. She continued with other vocabulary words such as *los ojos, el pelo, el estómago, la cadera, las nalgas, el brazo, el dedo gordo, las manos, los dedos*, each time pointing to the called-for word on herself while students pointed to the place on themselves. Mrs. Keifer then changed the routine by asking, for example, *Muéstrame la nariz*, and pointing to her shoulder. She expected the students to respond by pointing to the called-for word and to ignore the place she pointed to on herself. She finished the vocabulary review by playing the game "Simon Says..." in Spanish.

Affect Displays

Affect displays, the third category of kinesics, are nonverbal expressions, especially facial expressions, which reveal emotions such as happiness, fear, sadness, anger, distrust, and interest. Affect displays may be accompanied by speech or used alone. They may by used as emblems; for example, a smile may replace a verbal "thank you." Although affect displays normally occur without a deliberate attempt to communicate a message, it is possible to intentionally feign or intensify a particular emotion in order to send a specific message.

I observed Mrs. Keifer using exaggerated affect displays while reviewing vocabulary. For example, to convey the meaning of the verb *gustar*, she put her hand on her chest, threw back her head, and said, *Ahhh, me gusta...* During another class Mrs. Keifer took a basketball out of a closet and began to

dribble the ball. She pretended to be really enjoying playing with the ball in order to elicit the response, *Me gusta el básquetbol*. To convey the meaning of the verb *querer* she hugged herself. During the third class I videotaped, Mrs. Keifer reviewed adjectives dealing with feelings. She first modeled the affect display associated with the adjective then asked the students to demonstrate the affect display. To convey the meaning of the word *triste*, for example, she rubbed her cheeks, hung her head, and pretended to cry. To demonstrate *nervioso,* she bit her fingers, and for *emocionado*, she threw both hands in the air, quickly bent side to side at the waist, and put an excited expression on her face, including open mouth and wide eyes. After her demonstrations, she asked various students, *Póngase enfadado (or contento, furioso, feliz, alegre, deprimido)*.

Regulators

Regulators, the fourth category of kinesics, maintain the turn-taking between two or more interactants and keep the pace going. They are used to tell the speaker to hurry, continue, repeat, elaborate, or be more interesting. They tell the listener to pay attention, wait, or respond. Mrs. Keifer habitually used certain regulators to fulfill specific functions. If she wanted the students to repeat after her, she would pronounce the word or phrase then either rotate her closed hand at chest level, hold up her thumb, or hold up her thumb and index finger in an "L" shape. If she wanted a student to complete a sentence she would exhibit one of the following regulators: extend her open palm out toward the student, circle one or both hands toward herself, or wriggle her fingers toward herself. If a student began to respond, then hesitated, she would typically point directly at the student. If she wanted a student to speak louder, she would quickly open and close her fingers in front of her mouth. In order to indicate to the students that she wanted them to respond by raising their hands, Mrs. Keifer raised her hand while asking the question.

The most consistent pattern I observed was Mrs. Keifer's use of regulators to mark the transition between activities. It was almost a ritual for her to clap her hands, bow her head slightly while spreading her arms down and away from her body, and clap her hands again to indicate to the class that they should be prepared to change gears. Her verbal signals varied from, *¿Está perfecto?, ¿Está bien, no?, ¡Bueno!, ¿Okay, listos?, ¡Bravo!,* but the nonverbal behavior almost never deviated from her pattern.

Mrs. Keifer frequently used regulators to keep up a quick pace. She combined regulators and kinetographs to keep the pace going in the following excerpt. (SR stands for student response.) *¿Qué cuartos de la casa muestra ella? SR. La cocina. ¿Qué hacemos en la cocina? ¿SR. Cocinamos* (clapped hands) *o* (pointed to another student). *SR. Preparamos,* (snapped fingers and pointed to another student). *O...? SR.* (snapped fingers) *¿Sí. Preparamos,* (made chopping motion). *SR. Lavamos los platos,* (mimed washing dishes). *En qué otros cuartos está ella? SR. En el baño. ¿Qué hacemos en el baño? SR. Nos maquillamos,* (mimed putting on make-up). *SR. Nos lavamos,* (mimed

washing herself). *SR. Nos afeitamos,* (mimed shaving; mimed brushing teeth). *SR. Nos cepillamos los dientes. Nos ponemos la ropa en el baño,* (mimed putting on shirt).

Adaptors

Adaptors, the final category of kinesics, are normally performed unconsciously and are not used to purposively convey meaning. They are private behaviors people perform to satisfy physical or psychological needs or to handle stress. Burgoon, Buller, and Woodall (1989, p. 45) identify three types of adaptors. Self-adaptors include movements such as scratching one's arm, licking one's lips, or smoothing one's clothing. Alter-directed adaptors are related to contacts with another person. When talking to someone with whom you are uncomfortable, you may, for example, cross your arms over your chest. Object adaptors involve objects in the environment. Tapping a pencil, playing with a rubber band, or jiggling a piece of chalk are all examples of classroom object adaptors.

I observed Mrs. Keifer use only self-adaptors, all of which were intentionally exaggerated for the purpose of conveying meaning. The first self-adaptor I observed Mrs. Keifer use was holding her stomach as if she were ill when she said, "La comida está mala." She used the same self-adaptor another time when she said, *Todos nuestos amigos están enfermos.* The third time she used a self adaptor was when she said, *Me cae mal la comida de Taco Bell.* She held her stomach and stuck out her tongue as if she were going to be ill. Then she continued, *Lo siento. Cuando yo como la comida de Taco Bell me enfermo.* She first put her hand on her forehead and then on her stomach. The only other self-adaptor I observed was when Mrs. Keifer said, *Brrr...Tenemos frío,* and crossed her arms over her chest as if trying to keep warm.

Physical Appearance

The third category in Burgoon, Buller, and Woodall's (1989) classification, physical appearance, includes natural features such as body shape, facial structure, skin color, hair texture, and adornment features such as clothing, jewelry, and make-up. One may modify one's physical appearance for a specific purpose such as an interview or a social engagement. It is also possible to unintentionally convey a message about oneself by one's physical appearance. Mrs. Keifer did not use physical appearance to purposively convey meaning in Spanish.

Haptics

Haptics refers to the use of touch to communicate meaning. Mrs. Keifer did occasionally touch students while using kinetographs, as in the previously cited example about reflexive verbs where she pretended to wash their hair, wash their backs, scratch their backs, etc. In addition, there was one

occasion when a student asked what "travieso" meant. Mrs. Keifer explained, *Travieso es una persona un poquito mala.* She then poked a student on the arm, giggled, and hid her face behind a notebook. However, haptics did not seem to be an important means by which Mrs. Keifer conveyed meaning.

Proxemics

Proxemics refers to the use of space to communicate meaning. Although Mrs. Keifer was very active and moved around the classroom, she did not purposively use space to convey meaning.

Chronemics

Time can be used and manipulated to communicate a message. For example an executive keeping someone waiting in his outer office may convey the meaning that the executive is an important person. I did not observe Mrs. Keifer using time to convey meaning in any of the six classes I videotaped.

Vocalics

Of all the nonverbal behaviors suggested by Burgoon, Buller, and Woodall (1989), kinesics and vocalics have the greatest potential for expressing meaning. With the exception of the spoken word, vocalics include any vocal-auditory behavior such as pitch, volume, silence, laughter, sighing, and coughing. Another type of vocalics, the pause, is, according to Kellog and Lawson (1993), the single most powerful nonverbal behavior a teacher may use. There are, in addition, vocalic emblems such as: "uh-uh" for no, "uh-huh" for yes, "uh..." to express hesitation, and "shh" for be quiet. I observed several instances of Mrs. Keifer using vocalics to convey meaning. To explain the word "perro," she barked. She pronounced "querer" in a soft, slow, loving tone. She sang, La, la, la... to convey the meaning of *cantar.* In order to elicit the phrase, *No le gusta el básquetbol* she said, Ick, ick, blah! When explaining the significance of September 17, she said, *"El día de la independencia,"* and made trumpet-sounding noises. In addition, Mrs. Keifer effectively used the pause innumerable times.

Artifacts

The last of the seven categories of nonverbal behavior is artifacts. Burgoon, Buller, and Woodall (1989) define artifacts as, "the physical objects...that communicate directly, define the communication context, or guide social behavior in some way" (p. 123). Mrs. Keifer's use of artifacts can be classified into three types: (1) those prepared ahead of time, (2) those used spontaneously, and (3) those prepared by students. The first type included flashcards of vocabulary words, maps, the blackboard, cassette tapes, pictures, and a videotape. For vocabulary review during one of the observed

classes, Mrs. Keifer had prepared a concentration game on the board. There were six columns with five rows for a total of thirty vocabulary words. Each word was covered by a numbered sheet of paper. Students competed to see who could match the hidden vocabulary words.

Mrs. Keifer frequently used objects in the classroom to convey meaning. For example, to explain the meaning of the verb *querer,* Mrs. Keifer picked up a banana that was laying on her desk and said, *Yo quiero una banana.* She then picked up a coffee cup from her desk and said, *Yo quiero una taze de café*. To illustrate the word *las calculadoras* she held up a calculator. She made use of her banana to explain *gustar* by holding up the banana and saying, *Mmm...me gusta la banana.* Her coffee cup came in handy to explain the word *caliente*. She picked up her coffee cup, pretended to take a sip, and said, *Oooo...está caliente el café*. In the previously cited example regarding reflexive verbs, Mrs. Keifer picked up a souvenir doll that was part of a classroom display and pretended that it was a baby. She used a basketball and a tennis ball in her explanation of verbs like *gustar* and *detestar.*

During the six classes that I observed there was one instance of student prepared artifacts. Each group of three students was given a large sheet of paper and a set of directions and was asked to draw a monster based on the directions. When all the groups had completed their drawings, Mrs. Keifer taped them to the board and verified that each illustration matched the directions. In this way, the class was able to review vocabulary about parts of the body.

Discussion

One of the goals of the study described in the present paper was to see if the observed FL teacher's nonverbal teacher talk could be classified according to the framework suggested by researchers in the field of communication. The analysis of the six videorecordings that provided the data for the present study revealed that Mrs. Keifer used three of the seven categories of nonverbal behavior outlined in Table 1: kinesics, vocalics, and artifacts. Within the broad category of kinesics, Mrs. Keifer's nonverbal teacher talk included emblems, six types of illustrators, affect displays, and self-adaptors. The four types of kinesics not used by Mrs. Keifer (ideographs, rhythmics, alter-adaptors, and object adaptors), are not defined by Ekman (1980) as meaning-bearing. In addition, batons and illustrators, although used by Mrs. Keifer, were not observed to facilitate comprehension of the FL. Therefore, these six types of kinesics, marked with an asterisk in Table 1, might best be eliminated from the framework in future studies of nonverbal FL teacher talk.

Another goal of the study was to operationalize the framework for use in studies in FL classes. In order to utilize the framework we must be able to define the various components as they relate to the particular area of inquiry. The findings section of the present paper presents a vivid description of what the various categories of nonverbal FL teacher talk look like.

The third goal of the study was to report on the students' perceptions

of the teacher's nonverbal behaviors as an aid to comprehension of FL input. Shortly after the videotaping of the six classes was completed, the students were asked to respond in writing as to whether their teacher's gestures and other body movements helped them understand Spanish. The responses overwhelmingly supported the use of nonverbal teacher talk as an aid to comprehension of FL input. The following five quotations are representative of the responses.

1. When the teacher uses her hands and gestures, it helps me to understand better what she's trying to say. Especially when she is speaking only in Spanish, because the motions help me to visually comprehend what I may not understand at all if she was just standing there talking. It also keeps my attention when she is constantly moving as opposed to boring the students to death. The movements set a more relaxed and casual atmosphere.
2. I think the more physical teaching increases the understanding of the students. It helps them to understand because they have a vision in their mind that stays and helps them to remember. It is much more effective than having a teacher that stands up in front of the class and lectures in monotone. That makes you not want to learn it.
3. I believe that without the use of body language and use of expressions I would be completely lost in learning this language. It helps me relate to what she is talking about when she can show me it at the same time.
4. The gestures help very much. The whole idea doesn't always get across merely within the language. However, when body language is also used, the Spanish is much more understandable. It helps keep you interested and alert too.
5. I think gestures help me learn Spanish. Occasionally when I don't understand what my teacher is saying, her gestures make her message clear. A teacher who moves and uses gestures is also more fun, and therefore interesting, than a teacher who just writes on the board and lectures the class. A teacher who uses gestures teaches better, and makes it easier to learn.

Pedagogical Implications

The approach taken in the present study is based on the belief that in order to improve teaching, we must first have an adequate description of the teaching act. The framework proposed in the current paper can be a means by which FL teacher educators initiate pre-service (PS) teachers into nonverbal FL teacher talk and by which in-service teachers can learn to optimize their own nonverbal behavior. Before offering specific suggestions on applying the framework, three points must be made. First, anyone who has observed or participated in a FL class where the teacher used the FL as the language of instruction, has probably noticed that the teacher frequently depended on nonverbal methods of demonstrating meaning. Simple physical demonstration is important, especially for learners in lower-level classes who, because their knowledge of the language form is limited, rely on extra-linguistic

cues to close the gaps in comprehension (Omaggio Hadley, 1993, p. 162). Therefore, it seems important to include training in non-verbal teacher talk for pre-service teachers.

Gardner (1993), in his theory of multiple intelligences, maintains that all individuals not only possess some degree of bodily-kinesthetic intelligence, the intelligence that includes the use of nonverbal behavior, but can develop the intelligence through practice and/or training. We can assume, therefore, that PS teachers, even those who are less extroverted, could benefit from training in nonverbal teacher talk. Clearly, individuals have their own personal nonverbal styles and mannerisms. Training could help them not only to use their personal nonverbal behavior more effectively, but also to learn to use new nonverbal strategies.

Finally, the value of establishing nonverbal categories such as the ones suggested in the framework proposed in the current paper, is primarily heuristic. Just as verbal teacher talk has been broken down into categories: speech rate, vocabulary, syntax, discourse, and speech setting (Hatch, 1983), and grammar practices have been classified: mechanical, meaningful, and communicative (Paulston, 1972), breaking nonverbal behavior down into constituent parts facilitates discussion and scientific inquiry, and serves as a point of departure for PS teacher training. The following six suggestions, based on nonverbal behavior Mrs. Keifer was observed to use in the present study, may be helpful not only in PS teacher training, but also for in-service teachers who are interested in increasing the amount of comprehensible input in their classes via nonverbal teacher talk.

Raising PS Teachers' Level of Awareness for the Nonverbal

PS teachers will most likely be somewhat familiar with the nonverbal behaviors observed in the present study since they are behaviors which have been identified by researchers in communication to occur in typical day-to-day nonclassroom communication. In addition, if the PS teachers learned the FL in a classroom setting, their teachers may have exhibited some of the same behaviors. The first task of the teacher educator will be to raise the PS teachers' level of awareness for the nonverbal. There are several ways to accomplish this task.

The initial discussion of nonverbal teacher talk should include the fact that teacher talk, like other kinds of communication, is plurimodal; both nonverbal and verbal work together to convey meaning. The seven categories of nonverbal behavior as defined in Table 1, should be introduced in order that everyone may have a common terminology for the categories and types of nonverbal behavior. PS teachers should be asked to become more aware of their own nonverbal behavior and that of others in their daily nonclassroom communication. They should be asked to observe the nonverbal behavior of their instructors in the FL classes they are currently enrolled or in other classes.

It would be useful to identify in-service teachers who use the target language extensively and ask PS teachers to observe their classes. In-service

teachers who typically provide their students with a rich source of nonverbal talk could be videotaped. The videotapes could be viewed and discussed in light of the nonverbal behavior in the methods course which precedes the teaching practicum. Videotapes could also be made of the PS teachers' teaching demonstrations. The constructive criticism of the videotapes should include effective use of nonverbal teacher talk.

Identifying Native and Target Culture Emblems

Both native language and target language emblems can be used to facilitate meaning in the FL classroom. During an in-class discussion PS teachers can share native language emblems with which they are familiar and outside of class be alert to additional emblems. Many FL educators have advocated the teaching of emblems as part of the culture (i.e. Antes, 1996; Brunet, 1985; Wylie, 1985; Raffler-Engel, 1980; Richardson, 1979; Gannon, 1977; Beattie, 1977; and Brault, 1963). PS teachers should research the emblems used in the target culture, not only for their cultural value, but also for their potential of conveying meaning.

Using Illustrators, Affect Displays, and Self-Adaptors in TPR Activities

In order to enable PS teachers to become proficient in using illustrators, affect displays, and self-adaptors, activities such as TPR, mime, and charades could be useful training techniques. Vocabulary that is easily explained nonverbally, such as action verbs, adjectives, and expressions of feelings, could be identified. PS teachers could practice using kinetographs, pictographs, spatials, and deictics, affect displays, and self-adaptors in illustrating the vocabulary nonverbally. Thus, they will develop a feel for using their whole bodies to convey meaning. For, as Wylie (1985) points out, "We communicate with every means at our disposal, so the whole body, not just the parts that produce speech, must be trained to communicate" (777-8).

Orchestrating Classroom Management with Regulators

The observed use of regulators in the present study is consistent with the small body of anecdotal literature which suggests regulators may be used to: (1) vary the tempo, (2) control participation, (3) signal changes, (4) indicate who is to respond, (5) cue choral response, (6) mark beginnings and ends of lessons, (7) give students an idea of what to expect, (8) listen, repeat, answer, or speak louder, (9) signal errors, (10) promote dialogue, and (11) stimulate classroom interaction (i.e. Walz, 1986; Barnett, 1983; Schachter, 1981; Richardson, 1979; Beattie, 1977; and Dolle and Williams, 1984). PS teachers should be asked to consult these sources for ideas and experiment using regulators during their practicum.

Making the Most out of Vocalics

The voice, a powerful tool for instruction, goes beyond the spoken word. PS teachers need to know when to speak softly or with more volume, and how to vary the pitch of one's voice for effect. They should know when and how long to pause for student response. In FL instruction the voice can be used effectively to convey the meaning of vocabulary. Perhaps the most efficient way to train PS teachers in making the most out of vocalics is to video or audio record the PS teachers during teaching demonstrations or during the field practicum. The PS teacher, along with peers and the teacher educator, can listen or watch the tapes together and offer constructive criticism.

Gathering Artifacts

It is never too early for PS teachers to begin to collect artifacts for classroom instruction. PS teachers could make a picture file and practice ways to use the pictures to develop vocabulary and to stimulate conversation. Most FL teachers keep artifacts from the target culture in their classrooms which can be used spontaneously to convey meaning. When traveling in the foreign culture, PS teachers should bring back artifacts to use in their classroom instruction. Observing experienced FL teachers' use of artifacts will be helpful to PS teachers.

Conclusion

FL education, in the last two decades, has emphasized the importance of providing FL learners with comprehensible input. Researchers have investigated specific verbal accommodations teachers make in using the FL in classroom management and explanation. However, FL teachers' nonverbal accommodations have not received equal scrutinity. The present paper offers a framework which identifies and classifies nonverbal behaviors which are purposively performed to facilitate comprehension of FL input. The paper describes an observational study which provides specific descriptions of what these behaviors look like.

Future research should include studies that replicate the observational study described in the present paper in order to determine if other FL teachers: (1) use nonverbal behaviors from the same categories as Mrs. Keifer did, and (2) use any of the nonverbal behaviors that Mrs. Keifer did not use such as physical appearance, proxemics, haptics, and chronemics. Such studies would distinguish idiosyncratic nonverbal behavior from that which is commonly used in FL classes and that which might be applied in other FL teaching situations. FL teachers engaged in all levels of instruction, including elementary, middle, secondary, and post-secondary schools should be observed to see if there are differences related to learners' ages. Studies involving different learner proficiency levels would also be useful to determine the

role of nonverbal teacher talk as the learners progress. Future studies might also include stimulated response interviews where the observed teacher and students view the videotapes together with the researcher and give their reactions to the impact of nonverbal behavior on comprehension.

I envision research on FL nonverbal teacher talk similar to Grant and Henning's (1971) classic case study, *The Teacher Moves*, in which the researchers analyzed the nonverbal behavior of five elementary school teachers. In their study, Grant and Hennings videotaped five twenty-minute lessons for each teacher. They then randomly selected two two-minute segments from each lesson and analyzed the teacher's movements according to a category system they had designed. The data generated from the coding system was analyzed statistically in order to determine commonalities and differences among the teachers as well as functions served by the movements. The teachers in the Grant and Hennings study used English, the students' native language as the language of instruction. Replication of their study with FL teachers would contribute greatly to the knowledge base of foreign language education.

Quantitative research is also needed in order to determine which nonverbal behaviors significantly affect comprehension. Allen (1995) has conducted such research on the effects of emblems on learners' ability to recall French expressions. Controlled empirical studies in which other categories of nonverbal behavior are isolated should be conducted to determine which specific nonverbal accommodations facilitate FL learning and/or comprehension.

Investigations into the plurimodal aspects of teacher talk can potentially assist FL educators in providing a rich source of comprehensible input. Research conducted on the verbal component has provided insight into effective verbal accommodations. It is hoped that the present paper will provide a stimulus for much needed research in the area of nonverbal FL teacher talk.

References

Allen, L. Q. (1995). The effects of emblematic gestures on the development and access of mental representations of French expression. *Modern Language Journal,* 79(4), 521-529.

Antes, T. A. (1996). Kinesics: The value of gesture in language and in the language classroom. *Foreign Language Annals*, *29*, 439-448.

Barnett, M. A. (1983). Replacing teacher talk with gestures: Nonverbal communication in the foreign language classroom. *Foreign Language Annals, 16, 173-176.*

Beattie, N. (1977). Nonverbal aspects of the teaching and learning of foreign languages. *Audio-Visual Language Journal, 15*, 175-181.

Brault, G. J. (1963). Kinesics and the classroom: Some typical French gestures. *French Review, 36*, 374-382.

Brunet, J. (1985). Le langage des gestes. *Canadian Modern Language Review*, *41*, 543-550.

Burgoon, J., Buller, D. B., & Woodall, W.G. (1989). *Nonverbal communication: The unspoken dialogue.* New York: Harper & Row.

Dinsmore, D. (1985). Waiting for Godot in the EFL classroom. *ELT Journal, 39*, 225-234.

Dobbs, J. (1995). Assessing our own patterns of discourse. *TESOL Journal, 4*, 24-26.

Dolle, D., & Williams, G. M. (1984). The communicative approach to foreign language teaching: The teachers' case. *European Journal of Teacher Education, 7*, 145-154.

Ekman, P. (1980). Three classes of nonverbal behavior. In W. von Raffler-Engel (Ed.), *Aspects of non-verbal behavior* (pp. 89-102). Lisse: Swets and Zeitlinger.

Ekman, P., & Friesen, W.V. (1969). The repertoire of nonverbal behavior: Categories, origins, usage, and coding. *Semiotica, 1*, 49-98.

Flanders, N. A. (1970). *Analyzing teaching behavior.* Reading: Addison Wesley.

Gannon, R. (1977). Teaching non-language: Where does the ESL teacher come in? *TESL Talk*, 8, 9-12.

Gardner, H. (1993). *Multiple Intelligences: The theory into practice.* New York: Basicbooks.

Grant, B. M., & Hennings, D.G. (1971). *The teacher moves: An analysis of non-verbal activity.* New York: Teachers College Press.

Hatch, E. (1983). Simplified input and second language acquisition. In R.W. Andersen (Ed.), *Pidginization and creolization as language acquisition* (pp. 64-86). Rowley: Newbury.

Jarvis, G. A. (1968). A behavioral observation system for classroom foreign language skill acquisition activities. *Modern Language Journal*, 52, 335-341.

Kellogg, P., & Lawson, B. (1993). *Envoy: Your personal guide to classroom management.* Battle Ground: Michael Grinder.

Kirch, M. S. (1979). Non-verbal communication across culture. *Modern Language Journal, 63*, 416-423.

Krashen, S. D., & Terrell, T. D. (1983). *The natural approach: Language acquisition in the classroom.* San Francisco: Alemany Press.

Marshall, C., & Rossman, G. B. (1989). *Designing qualitative research.* Newbury Park: Sage.

Mora, R. (1995). Silence, interruptions, and discourse domains: The opportunities to speak. *Applied Language Learning, 6*, 27-39.

Moskowitz, G. (1976). The classroom interaction of outstanding foreign language teachers. *Foreign Language Annuals*, *9*, 135-157.

Omaggio Hadley, A. (1993). *Teaching language in context* (2nd ed.) Boston: Heinle & Heinle.

Patton, M.Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park: Sage.

Paulston, C. B. (1972). Structural pattern drills: A classification. In H. Allen & R. Campell, (Eds.) *Teaching English as a second language* (pp. 129-138). New York: McGraw-Hill.

Raffler-Engel, W. von. (1980). Kinesics and paralinguistics: A neglected factor in second-language research and teaching. *Modern Language Review, 36*, 225-237.

Richardson, J. P. (1979). Nonverbal communication in the teaching of foreign languages. *Babel, Journal of the Australian Federation of Modern Language Teachers' Association*, *15*, 23-32.

Riseborough, M. G. (1981). Physiographic gestures as decoding facilitators: Three experiments exploring a neglected facet of communication. *Journal of Nonverbal Behavior, 5*, 172-183.

Rothfarb, S. H. (1970). Teacher-pupil interaction in the FLES class. *Hispania,53,* 256-263.

Schachter, J. (1981). The hand signal system. *TESOL Quarterly*, *15*, 125-138.

Thornbury, S. (1996). Teachers research teacher talk. *ELT Journal, 50*, 279-289.

Ulichny, P. (1996). Performed conversations in an ESL classroom. *TESOL Quarterly, 30*, 739-764.

Van Lier, L. (1984). Analysing interaction in second language classrooms. *ELT Journal, 38,* 160-169.

Van Lier, L. (1988). *The classroom and the language learner: Ethnography and second language classroom research.* London: Longman.

Walz, J. C. (1986). Increasing student talk time in the foreign language classroom. *The Canadian Modern Language Review*, *42*, 952-967.

Ward, L., & Raffler-Engle, W. von. (1980). The impact of nonverbal behavior on foreign language teaching. In W. von Raffler-Engel (Ed.), *Aspects of nonverbal behavior* (pp. 287-311). Lisse: Swets and Zeitlinger.

Wing, B. H. (1987). The linguistic and communicative functions of foreign language teacher talk. In B. VanPatten, T. R. Dvorak, & J. F. Lee (Eds.), *Foreign language learning*: *A research perspective* (pp. 158-178). New York: Newbury.

Wolcott, H. F. (1990). *Writing up qualitative research.* Newbury Park: Sage.

Wragg, E. C. (1970). Interaction analysis in the foreign language classroom. *Modern Language Journal, 54*, 116-120.

Wylie, L. (1985). Language learning and communication. *French Review, 58*, 777-785.

Author

LINDA QUINN ALLEN, Assistant Professor of French and Education, University of Missouri-St. Louis, Department of Foreign Languages & Literatures, 554 Clark Hall, 8001 Natural Bridge Road, St. Louis, MO 63121-4499. Specializations: applied linguistics, foreign language teacher education.

Applied Language Learning
2000, Vol. 11, No. 1, pp. 177-204

Grammaticality Judgment Tests
How Reliable and Valid Are They?

Youngju Han
Youngsan University

A number of researchers now recognize that grammaticality judgment data do not always reflect linguistic knowledge and that they may lack reliability. This study addresses the issue of the reliability of grammaticality judgment tests (GJTs) and explores what it is that they measure (i.e., their construct validity). Various methods of examining their reliability demonstrate that grammaticality judgment tests used in this study had relatively low reliability. The analyses of response patterns suggest some doubts about the extent to which grammaticality judgment data represent learners' grammatical knowledge. The weak relationship between timed and delayed judgments suggests that learners may use different types of knowledge under different task conditions. Qualitative analysis of the interview data indicates considerable confusion and indeterminacy in the learners' judgments. The results of the present study suggest that researchers should be aware that there is a problem of reliability and validity in grammaticality judgment tests as an instrument for investigating learners' knowledge of grammatical rules.

A grammaticality judgment test is a test in which learners are asked to make judgments regarding whether individual sentences are grammatical or ungrammatical. Second language acquisition (SLA) researchers rely extensively on the data from GJTs. For example, second language (L2) researchers working within the Universal Grammar (UG) paradigm often use judgment data to test whether UG is accessible to L2 learners. Judgment data, as White (1989) has pointed out, have the advantage over naturally occurring data in that they provide the researcher with data about certain forms that rarely show up naturally in L2 learners' language. By manipulating the sentences in GJTs, researchers can investigate forms that L2 learners fail to use in everyday language.

More importantly, there is a theoretical rationale for using grammaticality judgment data (Ellis, 1990). It rests on the distinction between competence and performance: internalized mental knowledge and actual language use. According to many L2 researchers, grammaticality judgment data provide a means of investigating learners' abstract internalized knowledge as

separate from their actual performance. Thus, Sorace (1985) stated, "the learner's interlanguage representations cannot be accessed directly, but only through her intuitions of grammaticality" (p. 240). Grammaticality judgment data are then assumed to be a window into the learner's linguistic competence. They indicate what the learner knows, as distinct from what she/he actually does.

Problems with Grammaticality Judgment Data

Increasingly, researchers have recognized that judgment data are not solely a reflection of linguistic knowledge, as assumed in the past, but are influenced by a number of other factors such as processing constraints, response biases, the nature of the target structures, and inter- and intra-learner differences, just to name a few. Notably, Birdsong (1989) has argued that grammaticality judgment data reflect metalinguistic performance in which various factors as well as linguistic knowledge interact.

Given the different sources of variability reported, some researchers emphasize the difficulty in determining what it is that learners actually attend to when making judgments. Ellis (1990, 1991) mentions a number of test-taking strategies subjects might employ. The think-aloud protocols of his subjects revealed evident confusion in the selection and use of strategies and a considerable amount of guessing involved in making grammaticality judgments. For example, while some subjects tried a semantic interpretation, other learners seemed to use implicit knowledge and still others tried to access explicit knowledge. Often, the same learner would provide a definite response on some occasions, even when s/he was uncertain, but would admit to uncertainty and choose a *not sure* response on other occasions.

Learners may reject sentences not because they are ungrammatical but because they pose processing problems for them. Schachter and Yip (1990) noted that both native and nonnative speakers often rejected certain types of sentences involving subject extraction even when they were grammatical. Those sentences—*such as, Which book did you say John believes offended many people?*—were found to impose processing problems by inducing an initial misparse (i.e., *Wh* word as the object of *believe*). Thus, they suggest that grammaticality judgments may reflect processing factors rather than grammatical knowledge.

Just as grammaticality judgments are a kind of performance data, it is often the case that they lack consistency (cf. Birdsong, 1989). Ellis (1990) reports that the advanced and intermediate learners in his study changed between 22.5 per cent and 45 per cent of their judgments respectively in a test-retest study. In addition to the variation across learners, the stability of responses varied depending on the structures tested and the response type (e.g., binary or preference).

Motivated by Ellis' (1990) concern regarding the reliability of GJTs, Gass (1994) investigated their test-retest reliability. College ESL learners took the same test twice with a one-week interval. Learners were required to make binary judgments and then to rate the degree of confidence about their

judgments on a seven-point scale. The tested grammatical feature was the function of relative pronouns. The test-retest reliability coefficients for overall sentences were .598 in the case of binary judgments and .644 in the case of judgments on a rating scale. Learners changed 19.4 per cent of their binary judgments and 42.6 per cent of their judgments on a rating scale. However, when the sentences were grouped according to a relative clause position, and the sentences for which learners demonstrated erratic responses (66 sentences out of 552) were removed, the reliabilities for each relative clause position were between .862 and .731 in the case of binary judgments and between .937 and .841 in the case of judgments on a rating scale. In addition, Gass shows that the results for judgment data and production data were similar. She thus concludes that if one removes spurious data reflecting learners' indeterminacy, grammaticality judgment data can be used with confidence.

Ellis (1991) suggests that beginner learners may not be suited to GJTs in that their judgment data are not validated by data from other types of tasks (e.g., oral production). Sorace (1985) reports a nonsignificant but negative correlation between the judgment scores and the scores on the oral production task in the case of beginner learners but a significant positive correlation in the case of intermediate learners.

A number of studies suggest that there is a need for researchers to examine response patterns (cf. Birdsong, 1989). Bley-Vroman et al. (1988) note that, out of all the sentences, their participants judged sentences as ungrammatical more often than as grammatical regardless of their grammaticality. They suggest that when the participants were uncertain, they had a tendency to reject a sentence as being grammatically incorrect. However, it is not yet clear what causes such response biases.

Finally, a noticeable phenomenon often reported is accuracy asymmetry in judging grammatical versus ungrammatical sentences. Bley-Vroman, Felix, and Ioup (1988) and Gass (1983) report that their participants scored higher with ungrammatical sentences. On the other hand, a number of other studies (e.g., Ellis, 1991; Hawkins et al., 1993; Uziel, 1993) show that learners scored higher with grammatical sentences. Bley-Vroman, Felix and Ioup suggest as an explanation for accuracy asymmetry in their study that the subjects' tendency to reject sentences in general raised their accuracy rate in regard to ungrammatical sentences (see Birdsong [1989] for a detailed explanation). Again, it is not yet clear what causes accuracy asymmetry.

Immediate responses are generally required so as to tap implicit knowledge, although a few studies (e.g., Uziel, 1993; White, 1988) have imposed a time limit. In most cases, grammaticality judgment tests are not paced. Thus, Hedgcock (1993) observes a *fundamental contradiction*:

> When subjects are engaged in judgment tasks, the researcher hopes to study behavior which reflect underlying competence—competence which, formally speaking, should not require concerted effort on the part of the learner. In fact, judgment tasks by their nature engage learners in an activity

> that is highly effort*ful* and therefore not necessarily apt to bring about behavior which is essentially unmonitored, particularly when learners are subject to time pressures. (p. 3)

In conclusion, it is now well recognized that GJTs, like any other data collection instrument, provide a kind of performance data. They are no longer assumed to have undisputed validity as an index of linguistic competence, as was claimed in the past. There is also a problem of reliability. Learners are often inconsistent in their performance on GJTs. Little is known yet about what learners base their judgments on and what extraneous factors should be controlled to improve reliability. Thus, there is a need for researchers to recognize and investigate these problems and to find solutions. It is also obviously necessary to interpret the results from grammaticality judgment data with caution.

Given that doubts exist about the validity and reliability of grammaticality judgments, the present study addresses the issue of the reliability of grammaticality judgment tests and also explores what it is that they measure (i.e., their construct validity). The study investigates the following research questions:

1. How reliable are grammaticality judgment tests?
2. Is there a relationship between timed and delayed judgments?
3. What do learners actually do when making judgments?

Method

Participants

A total of 48 college ESL learners with different first languages (L1s) took part in this study. Three of the participants were native speakers of Colombian Spanish, one Chinese, two French, one Hebrew, four Japanese, sixteen Korean, two Polish, one Russian, two Swedish, four Taiwanese Chinese, nine Thai, two Turkish, and one Venezuelan Spanish. At the end of the fourteen-week program, most of the learners planned to take the TOEFL test in order to be admitted to a university in the United States.

Relatively advanced L2 learners were chosen because, in reports of previous studies, researchers (Ellis, 1991; Sorace, 1985) have suggested the difficulty of using such tests with beginner learners. The other reason was that the structures investigated were likely to continue to pose problems to learners with many years' experience in learning English. However, the sample manifested a fair range of proficiency levels as reflected in the scores on the TOEFL test.

To increase the size of the sample, participants were taken from both the first (n=26) and the second (n=22) summer sessions of 1994. A MANOVA analysis performed to see if there was a group effect indicated that the two groups of learners were statistically the same group.[1] Therefore, in

subsequent statistical analyses the two groups of learners were treated as a single group.

Target Grammatical Structure

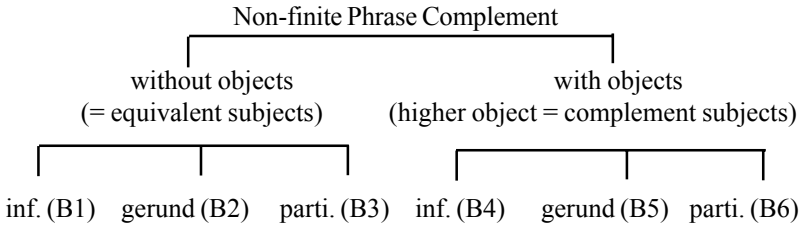
The target grammatical structure chosen was verb complementation (i.e., infinitives, gerunds, and *that* clauses that function as the object of a main finite verb). Verb complements were chosen because this is a grammatical feature that is frequently taught, yet one with which all L2 learners tend to have problems (e.g., **She admitted to tell lies*. instead of *She admitted telling lies*.) regardless of their L1 (Burt & Kiparsky, 1972).

There are in English two main types of verb complement--finite clauses (i.e., *that* and *wh* clauses) and non-finite phrases depending on which type of complement any given main verb takes (Quirk et al., 1978). The types are as follows:

Type A: Some verbs take mainly finite clauses as their object, although they may take non-finite phrases as their object as well. For example:

He suggested that I should go with him.
I did not know why he left.

Type B: Some verbs take mainly non-finite phrases as their object, although they may also take finite clauses as their object. Non-finite phrases are further subcategorized into those without objects that have the same subject in the higher clause and the complement clause, and those with objects that have the subject of the complement equivalent to the object of the main clause. Within each of these subtypes, there are infinitive complements, gerund complements (which function primarily as nouns), and participle complements. Type B complements can be classified in six ways as follows:



e.g., *He longed to do the work. (B1)*
I considered going to the party. (B2)
He started going to concerts frequently. (B3)
I expected him to study law. (B4)
I imagined him being a genius. (B5)
I kept him waiting for me. (B6)

A total of 14 verbs were used, reflecting the possible five error-types L2 learners make:

1. Learners use infinitive instead of gerund complements without objects. (i.e., **He denied to say things like that.*)
2. Learners use infinitive instead of participle complements with objects. (i.e., **I kept him to wait for me all day.*)
3. Learners use gerund instead of infinitive complements without objects. (i.e., **She hoped learning Russian.*)
4. Learners use gerund instead of infinitive complements with objects. (i.e., **She expected him studying law.*)
5. Learners use a finite clause instead of a non-finite complement. (i.e., **He wanted that I should go with him.*)

Instruments and Procedures

GJT

In a pre-pilot study carried out with native speakers, a computerized GJT was designed (see Appendix A). A total of nine native speakers took the computerized GJT and then the test sentences were revised according to their comments to make sure that the sentences in the test were grammatically and semantically correct.

A pilot study was then conducted with a group of L2 learners *(n*=17) from the same population that was later investigated in the main study. The purpose of the pilot study was to further test the GJT in order to discover whether there were any problems with individual sentences. The study was also intended to examine whether learners had any problems with the computerized GJT, i.e., whether they had sufficient time to make judgments and select an appropriate response key and whether they had any mechanical or procedural difficulties in using the computer keyboard itself. The GJT used in the pilot study is presented in Appendix B.

A test was designed for the main study in which participants were presented with a total of 34 sentences containing verb complements (see Appendix C). In most cases, there were two sentences (one grammatical and the other ungrammatical) for each main verb. However, three sentences (two grammatical and one ungrammatical) were given in two cases: that of a main verb that also takes a finite clause as its object and that of the main verb *see*, which takes either a bare infinitive or a participle complement as its object. Thus, of the total of 34 sentences, 20 sentences were grammatical and 14 sentences were ungrammatical. The 34 sentences were randomly ordered using the Ran 1 Program in the Statistical Analysis Software (SAS). The content of the test is shown in Table 1.

Table 1. Content of the GJT

Type of verb comp.	*No. of gramm. S*	*No. of ungramm. S*
gerund	3	3
pres. participle	3	3
inf. w/o obj.	3	3
inf. w/ obj.	2	2
non-finite comp.	3	3
finite clause	5	-
bare inf.	1	-

An attempt was made to choose moderately frequent main verbs and to ensure that all the sentences were of the same general length. With four exceptions, the main verbs were selected from the first thousand words for frequency based on *The Teacher's Word Book of 30,000 Words* (Thorndike & Lorge, 1944). The exceptions are *deny, imagine,* and *avoid*, which are in the second thousand words, and *encourage*, which comes from the third thousand words. Using less frequent main verbs was necessary to ensure sufficient sentences with the different verb complement types.

Learners were asked to make judgments of the sentences in a timed test. They performed the test individually on a computer. Each sentence appeared by itself on the monitor and stayed there for 3.5 seconds, during which time learners could make one of three possible responses--*grammatical, ungrammatical*, or *not sure*. In Bialystok's (1979) study learners were given three seconds to make immediate judgments. In the computerized GJT used in the present study, 3.5 seconds was considered sufficient for learners to make grammaticality judgments on the basis of their implicit knowledge (i.e., without accessing explicit knowledge) and then to press the answer key to record their answers on the computer. Before the actual test learners read the instruction screen and practiced with eight example sentences in which dative alternation was used. One week later they took the same test on the computer again in order to examine the test-retest reliability of GJTs.

Interview Procedure

Each learner was individually interviewed a week after the second test using the same Grammaticality Judgment Test as a basis. The learners were shown each sentence written on a card, and they were allowed as much time as they needed to make judgments. Each learner was asked:

1. Is this sentence grammatically correct or incorrect?
2. How sure are you about your judgment?
3. Did you base your judgment on how the sentence sounds--whether it sounds correct or incorrect? Or did you try to think of a rule to help you decide?

4. Do you know a rule that can help you decide? Can you tell me what the rule is?
5. (Depending on the answer in #3) Do you remember whether you were taught about verb complements? Can you explain what a verb complement is?

The interview sessions were audio-taped and then transcribed in normal orthography.

Data Sets

These instruments and procedures afforded the following data sets:

Set A: Timed GJT 1

The learners (*N*=48) were awarded a score of 1 if they correctly identified a sentence in the timed test. Both incorrect and *not sure* responses were scored as 0 because they were considered to indicate lack of knowledge.

Secondly, to compute scores for the different complement types, the sentences on Timed GJT 1 were grouped in the following way:

1. As mentioned above, the GJT provided two sentences (one grammatical and the other ungrammatical) for each main verb (e.g., *offer*) that takes only one complement type. The two sentences for each of these main verbs were grouped under the complement type each main verb takes.
2. Similarly, the GJT provided three sentences (two grammatical and one ungrammatical) for those main verbs (e.g., *hope*) that take either a non-finite complement (e.g., infinitive) or a finite complement (e.g., *that* clause). In these cases, the two grammatical sentences were grouped according to the complement type used in each sentence (non-finite complement or *that* clause). The ungrammatical sentence was grouped under the non-finite complement (e.g., infinitive) the main verb takes.
3. In the case of the three main verbs *avoid, want,* and *encourage*, a non-finite complement (e.g., gerund or infinitive) was used in the grammatical sentence and a finite complement (e.g., *that* clause) was used in the ungrammatical sentence. In these cases, the three grammatical sentences for the three main verbs were grouped under the complement type used in each sentence, while the three ungrammatical sentences were grouped under the finite complement. Table 2 shows the main verbs and the maximum scores for each complement type in Timed GJT 1.

Set B: Timed GJT 2.

For the second Timed GJT, scoring was the same as in Set A.

Set C: Delayed GJT

For the Delayed GJT, audio-taped delayed judgments by each learner (*N*=48) were transcribed. Two separate sets of scores were computed for the delayed test. The learners were awarded a score of 1 if they made a correct judgment on sentences in the delayed test. Both incorrect and *not sure* responses were

scored as 0 as in the timed test. Scores for each complement type were computed in the same way as in Set A.

Table 2. Main Verbs and Maximum Scores for Each Complement Type in Timed GJT 1

Type of verb comp. (max. score)	*Main verbs*
gerund (7)	cor. - deny, admit, suggest, avoid incor. - deny, admit, suggest
pres. parti. (6)	cor. - catch, keep, see incor. - catch, keep, see
inf. w/o obj. (6)	cor. - hope, offer, decide incor. - hope, offer, decide
inf. w/ obj. (6)	cor. - allow, expect, want, encourage incor. - allow, expect
that clause (8)	cor. - deny, admit, suggest, hope, decide incor. - want, avoid, encourage
bare inf. (1)	cor. - see

As the interview session proceeded, some of the learners changed their initial judgments. In these cases, the final judgment was scored if the altered response was initiated by the learner. However, when they changed their judgment following prompts provided by the researcher, the changes were disregarded.

Set D: Transcriptions from the Interview Session

Although audio tape recordings were made of each learner (N=48) and all 48 delayed judgments were transcribed, because of the time required to make verbatim transcriptions, 30 interviews were randomly chosen and transcribed for the purpose of a qualitative analysis.

Results

Reliability of the GJTs

The reliability of the GJTs was investigated in three ways. (a) Test-retest reliability was examined by comparing scores in the two administrations of the Timed GJT. (b) Internal consistency reliability was examined using Cronbach's coefficient alpha. (c) Reliability was also examined through an analysis of the response patterns in the Timed GJT and the number of changes learners made between Timed GJT 1 and Timed GJT 2. The results of each of these analyses are reported below.

Test-retest Reliability

Test-retest reliability was considered using the data obtained from both Timed GJTs. This was done by reporting a measure of test-retest

reliability for the test as a whole. The reliabilities of different parts of the test were then examined, first for the sentences corresponding to each complement type and then for each individual sentence.

First, Pearson product-moment correlations were computed between the mean scores obtained on the two tests by the 48 participants. The overall test-retest reliability coefficient was .545 ($p<.0001$).

Second, the test-retest reliability coefficients for each of the complement types were computed in order to examine whether there was any variation in the reliabilities according to complement types, as Gass (1994) found for relative clause types. The mean scores of each complement type for each learner (*N*=48) in the two tests were used in these analyses. One complement type, *bare infinitive*, was excluded from the analysis because it had too small an item size (*n*=1). There were significant but moderate correlations for all the verb complement types. Table 3 presents the test-retest reliability coefficients for the five complement types.

Table 3. Test-retest Reliability Coefficients for the Five Complement Types/
Prob > |R| under HO: Rho=0/
N=48

	Gerund	*Pres.Parti.*	*Inf. w/o Obj.*	*Inf. w/ Obj.*	*That clause*
r	.62156*	.60368*	.41759*	.37104*	.38948*
p	.000	.0001	.0031	.0094	.0062

*significant at the .05 level

Third, test-retest reliabilities were examined for the individual sentences in the two tests. In this case, the correlations were computed by comparing subjects' *correct* and *incorrect* responses on the two tests. For the purpose of this analysis, *incorrect* responses were held to include *not sure* and *late* responses (i.e., responses not made within the 3.5 second time limit). The basis for such a decision was that both *not sure* and *late* responses indicated lack of grammatical knowledge; both were recorded as an incorrect response. There were a total of 15 statistically significant correlations out of a total of 34. Table 4 presents the Pearson product-moment coefficients for individual sentences.

Table 4. Test-retest Reliability Coefficients Between the Timed GJTs 1 and 2 for Individual Sentences/
Prob > |R| under HO: Rho=0/
N=48

Item 1	.435*	10	.308*	19	.377*	28	. 318*
	.002		.033		.008		.028
2	.039	11	-0.042	20	0.209	29	.253
	.794		.777		.155		.083
3	.270	12	.433*	21	.448*	30	.266
	.064		.002		.001		.067
4	.114	13	.140	22	.422*	31	.370*
	.439		.343		.003		.010
5	.258	14	.101	23	.274	32	.367*
	.077		.493		.059		.010
6	.173	15	.048	24	.321*	33	.445*
	.239		.748		.026		.002
7	.167	16	.317*	25	-.030	34	.169
	.256		.028		.837		.251
8	.062	17	.538*	26	.155		
	.677		.000		0.292		
9	.335*	18	.344*	27	.148		
	.020		.017		.316		

* significant at the .05 level

Internal Consistency Reliability of the GJTs

The reliability in terms of internal consistency was measured by Cronbach's coefficient alpha. The computed Cronbach's coefficient alphas for Timed GJTs 1 and 2, and for the Delayed GJT were .530, .514, and .356 respectively.

Response Patterns in the GJTs

To examine response patterns in the grammaticality judgment tests, the following analyses were undertaken. The numbers of *grammatical, ungrammatical, not sure*, and *late* responses in Timed GJTs 1 and 2 were counted. A *chi*-square was computed to establish whether there was any statistically significant frequency difference in the *grammatical, ungrammatical,* and *not sure* judgments made by the subjects in Timed GJT 1. The accuracy of participants' judgments concerning the grammatical and ungrammatical sentences in the three GJTs was then examined. Also, the number of changes made in judgments of individual sentences from Timed GJT 1 to Timed GJT 2 was calculated.

First, the numbers of *grammatical, ungrammatical*, and *not sure* responses in Timed GJT 1 and 2 were counted. In Timed GJT 1, the participants responded *grammatical* for 972 sentences, *ungrammatical* for 488 sentences, and *not sure* for *66* sentences. In Timed GJT 2, the participants responded *grammatical* for 976 sentences, *ungrammatical* for 535 sentences, and *not sure* for *36* sentences. The participants produced a *late* response for 106 and 85 sentences in Timed GJT 1 and 2 respectively. The *late* responses were included in the *not sure* responses. The frequencies of the different types of response in Timed GJTs 1 and 2 are shown in Table 5.

Table 5. Frequencies of the Different Types of Response in Timed GJTs 1 and 2

	Gramm.	*Ungramm.*	*Not Sure/Late*
Timed GJT 1	972	488	172 (66/106)
Timed GJT 2	976	535	121 (36/ 85)

To investigate whether the participants were biased toward *grammatical, ungrammatical*, or *not sure* responses, a *chi*-square was computed. [2] In this analysis, there was no problem knowing what the observed values were, but there could be different options as to what the expected values were. A decision was made to exclude the *not sure* responses on the grounds that a *not sure* response was not either a *grammatical* or an *ungrammatical* response. Given this exclusion, the *chi*-square matrix was as follows:

	Observed	*Expected*
Grammatical	972	960
Ungrammatical	488	672

The *chi*-square statistic (=50.53) based on this assumption was significant at the .05 level. Thus, the null hypothesis that there was no significant difference between observed and expected frequencies was rejected. The participants were biased toward accepting the sentences as grammatical.

Next, the participants' performance on the grammatical and ungrammatical sentences in all three tests was examined. The descriptive statistics for the participants' responses to the grammatical (n=20) and ungrammatical (n=14) sentences in the three GJTs are shown in Table 6.

Table 6. Descriptive Statistics for the Grammatical and Ungrammatical Sentences in Timed GJTs 1 and 2, and the Delayed GJT

Timed GJT 1

	N	*Mean*	*Std Dev*	*Min.*	*Max.*
Gramm. Ss (*n*=20)	48	.692	.138	.400	.950
Ungramm. Ss (*n*=14)	48	.423	.172	.071	.786

Timed GJT 2

	N	*Mean*	*Std Dev*	*Min.*	*Max.*
Gramm. Ss (*n*=20)	48	.713	.139	.350	.950
Ungramm. Ss (*n*=14)	48	.482	.167	.143	.929

Delayed GJT

	N	*Mean*	*Std Dev*	*Min.*	*Max.*
Gramm. Ss (*n*=20)	48	.780	.084	.650	.950
Ungramm. Ss (*n*=14)	48	.569	.179	.071	.857

Their responses were then compared using a MANOVA test. The MANOVA test showed an overall item (grammatical vs ungrammatical) effect in the three GJTs. The multivariate F ratio (=34.635) for the overall item effect was significant (p<.0001). All univariate F ratios for the item effect in the three GJTs were also significant (p<.0001). The subjects scored significantly higher with the grammatical sentences in all three tests. Table 7 presents the results of the MANOVA analysis.

Table 7. MANOVA Statistics for the Overall Item Effect

Statistic	*Value*	*F*	*Num df*	*Den df*	*Pr > F*
Wilks' Lambda	.470	34.635	3	92	.000
Pillai's Trace	.530	34.635	3	92	.000
Hotelling-Lawley Trace	1.129	34.635	3	92	.000
Roy's Greatest Root	1.129	34.635	3	92	.000

* Multivariate Tests of Significance (S=1, M=.5, N=45)

Univariate Analysis for the Item Effect (df=1;94)

	Timed GJT 1	*Timed GJT 2*	*Delayed GJT*
F	71.70*	53.83*	55.18*
Pr > F	.000	.000	.000

* significant at the .05 level

Finally, to examine the nature of changed responses to individual sentences in the two administrations of the Timed GJT, the responses that changed from Timed GJT 1 to Timed GJT 2 were computed and plotted. The learners changed a total of 591 responses. This was 36.21% of the total responses. A Pearson product-moment correlation was computed between the scores of each learner and the number of changes which s/he made. There was a significant negative correlation (r=-.599, p<.000) (i.e., the more changes a learner made, the lower his or her score was likely to be). More proficient learners seem to have more stable rules and make more consistent judgments. Table 8 shows the nature, numbers, and percentages of the changed responses in Timed GJTs 1 and 2.

Table 8. Numbers and Percentages of Changed Responses in Timed GJTs 1 and 2.

	Timed GJT 1			
	Gramm.Res.	Ungramm.Res.	*Not Sure* Res.	Total
Timed GJT 2				
Gramm.Res.		157 (26.57)	95 (16.07)	252 (42.64)
Ungramm.Res.	193 (32.65)	-	51 (8.63)	244 (41.28)
Not Sure Res.	55 (9.31)	40 (6.77)	-	95 (16.08)
Total	248 (41.96)	197 (33.34)	146 (24.70)	591 (100.00)

Relationship Between Timed and Delayed Judgments

To examine the relationship between the timed and delayed judgments, the following analyses were carried out. First, the mean scores obtained on Timed GJT 1 and the Delayed GJT by the 48 participants were correlated using the Pearson product-moment coefficient. There was an overall significant correlation ($r=.511$, $p<.000$) between the two test scores.

Table 9. Pearson Correlation Coefficients for Timed GJT 1 and the Delayed GJT/
Prob > |R| under HO: Rho=0/
N=48

Item 1	.017	10	.365*	19	-.059	28	.012
	.909		.011		.691		.938
2	.031	11	.045	20	.173	29	.221
	.835		.762		.239		.131
3	.115	12	.161	21	.149	30	.128
	.435		.275		.312		.387
4	-.025	13	.033	22	.181	31	.254
	.865		.822		.217		.081
5	.244	14	.094	23	.248	32	.278
	.095		.526		.089		.055
6	.124	15	-.020	24	.116	33	.311*
	.399		.892		.433		.031
7	-.014	16	.320*	25	-.021	34	-.098
	.926		.027		.886		.509
8	.084	17	.451*	26	-.026		
	.569		.001		.859		
9	.259	18	.140	27	.146		
	.075		.342		.323		

* significant at the .05 level

Next, correlations were examined for the individual sentences in Timed GJT 1 and the Delayed GJT. There were only four statistically significant correlations out of 34 computed. Thus, there emerged weak sentence-level interrelationships between the timed and delayed judgments. The Pearson product-moment coefficients for the 34 sentences in Timed GJT 1 and the Delayed GJT are shown in Table 9.

Qualitative Analysis of the Interview Data

The transcripts of the interviews with the individual learners were examined to investigate what learners actually do when they are required to make grammaticality judgments. No attempt was made to quantify the interview data. The results of the qualitative analysis are discussed in the next section.

Discussion

Research Question 1

The reliability of the GJTs was examined in various ways. The results of these analyses are discussed separately.

Test-retest Reliability

The overall test-retest reliability of the Timed GJT was .545. There is no consensus regarding what level is acceptable. It exceeded .4, which is generally considered acceptable for a group investigation (Garrett, 1965). The result is, however, at the lower end of being acceptable. Thus, the learners appeared to be only moderately consistent between the two administrations of the same GJT.

The reliabilities for each complement type were compared and then ranked from high to low. The resulting consistency order was (a) *gerund* (b) *present participle* (c) *infinitive without object* (d) *that clause* (e) *infinitive with object*. This consistency order was quite different from the accuracy order for the five complement types on Timed GJT 1. The accuracy order on this test was (a) *infinitive with object* (b) *infinitive without object* (c) *present participle* (d) *that clause* (e) *gerund.* Gass (1994) reported the test-retest consistency order for different relative positions could be predicted by the accuracy order, as reflected in the accessibility hierarchy. This study, therefore, provides a different result from Gass, albeit for a different grammatical structure. Table 10 presents descriptive statistics for different complement types in Timed GJT 1.

Table 10. Descriptive Statistics for Different Complement Types in Timed GJT 1

	N	*Mean*	*Std Dev*	*Min.*	*Max.*
gerund	48	.4732	.2538	0	1.0000
pres. parti.	48	.5833	.2550	0	1.0000
inf. w/o obj.	48	.6736	.2173	.1667	1.0000
inf. w/ obj.	48	.6806	.2000	.1667	1.0000
that clause	48	.5339	.1800	.1250	1.0000

A more stringent way of examining test-retest reliability is to examine the extent to which participants' responses to individual sentences in the Timed GJT were consistent. They were, in fact, consistent at a statistically significant level on only 15 out of a total of 34 sentences.[3] In other words, the subjects' responses can be considered relatively inconsistent on 19 sentences. Overall, then, this suggests that the reliability of the test was low. The discussion can be summarized as follows:

1. In terms of overall mean scores, the participants were moderately consistent over a one-week period in their judgments on the Timed GJT.
2. In contrast to Gass (1994), no relationship was found between the consistency of the participants' responses to different grammatical structures and the accuracy of their judgments of sentences containing the different structures.
3. Test-retest reliabilities for individual sentences in the Timed GJT indicated a fairly low level of reliability for the test.

In general, these results fail to demonstrate that the test has high reliability. Also, they showed that the participants' knowledge of the grammatical structures (as reflected in the accuracy of their responses) is not an explanation of the reliability levels obtained.

Internal Consistency Reliability of the GJTs

The computed Cronbach's coefficient alphas for Timed GJTs 1 and 2 were .530 and .514 respectively, which may be considered acceptable for a group investigation (Mehrens & Lehmann, 1973), although, again, they are on the low side. The Cronbach's coefficient alpha for the Delayed GJT (=.356) is much lower than would normally be considered adequate for a group investigation. One explanation for the lower reliability of the Delayed GJT is that, since the learners were able to access their explicit knowledge as well as their implicit knowledge of the grammatical structures, the items in this test were less likely to be measuring a single trait.

The following is a summary of the discussions regarding internal consistency:

1. The internal consistency reliability for Timed GJTs 1 and 2 was low but acceptable.
2. The internal consistency reliability for the Delayed GJT was low and not acceptable. This may have been because the Delayed GJT was measuring more than a single general trait.

Response Patterns in the GJTs

The *chi*-square statistic suggests that the learners showed a response bias toward accepting rather than rejecting sentences, as discussed by Birdsong (1989). However, this result is different from that reported in Bley-Vroman, Felix & Ioup (1988) where participants showed a tendency to reject sentences of which they were uncertain. One possible explanation for this response bias is that the learners in the present study needed a reason to reject sentences. Thus, when they were uncertain and had no reason to reject a sentence, they may have responded *grammatical* as a kind of default response.

Furthermore, in Timed GJTs 1 and 2, the learners scored significantly higher with the grammatical sentences than with the ungrammatical sentences (see Table 6). This result reflects an accuracy asymmetry. Clearly, they experienced greater difficulty in responding to the ungrammatical sentences than to the grammatical sentences. One possible explanation for this result is that learners are inexperienced in responding to ungrammatical sentences, as it does not accord with normal learning behavior. Also, it may be the case that the response bias raised the accuracy for the grammatical sentences, while lowering it for the ungrammatical sentences (see Birdsong [1989] for the details).

The learners provided *not sure* responses 10.54% and 7.41% of the time in Timed GJTs 1 and 2 respectively. It should be recalled that these percentages include the *late* responses. In fact, the learners used the *not sure* response only 4.04% and 2.21% of the time in the two tests. Many of the learners (18 out of 48 learners) did not use the *not sure* option at all in Timed GJT 1. Even more learners (35 out of 48 learners) did not use the option in Timed GJT 2.

However, the learners made *late* judgments for 106 sentences and 85 sentences in Timed GJTs 1 and 2. These results suggest that, in fact, they were often uncertain of their responses. Also, they judged sentences correctly only 58.09% and 61.76% of the time in Timed GJTs 1 and 2. Thus, the learners appeared to experience considerable difficulty in making accurate judgments. Despite this difficulty, the learners preferred to make definite judgments and rarely used the *not sure* response. This reluctance to use the *not sure* response reflects similar findings in other studies (e.g., Ellis, 1990; Uziel, 1993).

In addition to the sparse use of the *not sure* option, all learners made changes in their responses from Timed GJT 1 to Timed GJT 2. However, some learners (e.g., Learners 7, 22, and 39) changed more responses than other learners (e.g., Learners 14 and 29). Overall, there was a significant negative correlation between the accuracy of the learners' judgments and the number of

changes they made. It may be that when learners have ambivalent knowledge of a grammatical structure, they prefer to guess rather than to admit they are not sure.

The discussions regarding response patterns in the GJTs can be summarized as follows:

1. The learners showed a response bias toward accepting rather than rejecting sentences. This result suggests that learners may use a kind of default strategy when they are uncertain. That is, they just accept sentences unless they have a solid reason to reject them.
2. The learners scored significantly higher with the grammatical sentences than with the ungrammatical sentences in Timed GJTs 1 and 2. One explanation for this asymmetry is that the learners actually had greater difficulty with the ungrammatical sentences than with the grammatical sentences, as they had less experience dealing with ungrammatical sentences. Also, the response bias toward responding *grammatical* might have raised the accuracy for the grammatical sentences, as discussed by Birdsong (1989).
3. The learners were reluctant to use the *not sure* response, even when they were uncertain. Thus, when learners make definite judgments, they may do so based on the knowledge they possess or just to avoid using the *not sure* option.
4. The significant negative correlation between the accuracy of the learners' judgments and the number of changes they made indicates that ambivalent knowledge may be the cause of the low level of test-retest reliability in the GJTs.

Research Question 2

The overall relationship between Timed GJT 1 and the Delayed GJT proved to be statistically significant. This indicates that there is a degree of relationship between the timed and delayed judgments. However, it should be pointed out that correlations involving *mean* scores are at best a poor indication of the strength of connection between the two measures. A better way of investigating the strength of this connection is by looking at the correlations involving individual sentences. After all, it may be possible to find an *overall* relationship even where there are no or only a few specific relationships involving individual sentences.

A more stringent way, then, of investigating the relationship is to examine the extent to which individual sentences show significant correlations on the two measures. There are only four sentences out of 34 that show significant correlations (all positive) between the scores of Timed GJT 1 and those of the Delayed GJT. This contrasts with 15 sentences that show significant correlations between the scores of Timed GJTs 1 and 2. In other words, when individual sentences are looked at there is evidence of a substantial number of significant relationships between Timed GJTs 1 and 2. However, in contrast there is little evidence of sentence-level interrelationships between Timed GJT 1 and the Delayed GJT. The relationship between the timed and

delayed judgments at the sentence level, therefore, emerged as a weak one.

However, it should be noted that, in general, the scores achieved for some sentences (e.g., those with infinitives) in the Delayed GJT manifest less variance than the scores for the other sentences. It is possible that more statistically significant correlations would have been found had the participants manifested greater variance in their judgments of all the sentences in the test.

In summary, then, the correlations involving individual sentences in Timed GJT 1 and the Delayed GJT suggest that the relationship between the timed and delayed judgments is not a strong one. In other words, the learners may have used different types of knowledge in the two tests. In most cases, grammaticality judgment tests are not paced. However, researchers intend to investigate learners' implicit knowledge. The results suggest that unpaced grammaticality judgment tests may not measure implicit knowledge as they are intended to do.

Research Question 3

The rules for verb complementation are that different types of verb complement occur depending on any given main verb. Bolinger (1968, cited in Celce-Murcia & Larsen-Freeman, 1983) suggests that there is a semantic principle that distinguishes the use of infinitive and gerund complements. The infinitive is used to refer to something "hypothetical, future, unfulfilled" whereas the gerund is used to refer to something "real, vivid, fulfilled." However, verb complements can be considered highly complex because their form-function relationships are not readily apparent.

The results of the qualitative analysis are briefly discussed by presenting examples. In each example, the number of the learner and the number of the sentence in the GJT to which s/he is responding are indicated.

Most of the learners tried to recall the rules they had been taught and then applied them mechanically and often inaccurately in judging sentences. Learner 8 commented:

> [L8 S22] - (I caught him stealing money.) [transcription] Learner: Incorrect. *Catch* needs *to* infinitive. Researcher: What does this sentence mean? Learner: I caught him when he is stealing money. I correct. I think this is correct. When he is stealing money, so I think we need progressive. [4]

Other learners appeared to be less reliant on explicit rules they had been taught and used their own rules which were explanatory in nature.

> [L3 S7] - (I encouraged them to speak in English.) [transcription] Correct. ... Anybody can't know any verb use *ing*, *to* verb but I just know the future usually *to* verb, past accident usually *ing*.

In this example, the learner demonstrates a partial understanding of the use of *infinitive* complements to express futurity and *gerund* complements to refer to past events. However, in the example below, the rule is misdirected as he focuses on the tense of the main verb rather than the infinitive.

> [L11 S15] - (I allowed her to go to the party.) [transcription] Incorrect. *Allowed her going to the party* because I already allowed ... tense is ... point of time is past and need change *going* because *going* already is done.

The same learner showed considerable confusion and uncertainty in making judgments on other sentences, applying different rules for the same main verb on different occasions. For example,

> [L11 S17] - (I caught him to steal money.) [transcription] Learner: Correct. *Caught* have *to* infinitive. Researcher: That's the rule? What does this sentence mean? Learner: I caught the ... steal. This mean is *I caught the robber*. Two happens in the same sentence. *I caught him* and *he steal*.

> [L11 S22] - (I caught him stealing money.) [transcription] Learner: Correct because *I caught him* and *if he steal the money*. This means already *he steal the money* and then *I caught him.* Researcher: So, is the form ok? Learner: *Caught stealing* ... difficult. Researcher: What is the rule? Learner: I usually use that *I caught him stealing money*. If I change *I catch him* doesn't use gerund. Researcher: If we have to say *I caught*, then is this sentence OK? Learner: Yes. Researcher: What is the rule here? Learner: Gerund is used but happening is already done.

Learners' judgments were often based on "feel." However, some learners seemed not to rely on explicit knowledge at all. Learner 2, who was one of the high scoring learners in the Delayed GJT, could not provide rules at all, for example:

> [L2 S2] - (She expected him to study law.) [transcription] Incorrect, no, correct. ... I feel it. I can't say any more ... no, when I read it, I feel it if it is right or wrong. ... Yes, I learned rules. I know, I know when I see it.

Although she often commented that she knows whether a sentence is correct or not if she sees it, the examples below illustrate that her "feel" depends on the stimulus sentence.

> [L2 S9] - (I saw her walk away.) [transcription] Learner: Correct no incorrect. *I saw her walked away*. Researcher: It's not correct. Learner: Not correct because *I saw her walking away*. ... This is past. It should be past here, too

> [L2 S14] - (I saw her to walk away.) [transcription] Learner: Incorrect. *I saw her walked away*. Researcher: We have to use past here. Is that the rule you remember? Learner: Past voice, *I saw her walked away* because it is past tense.

> [L2 S26] - (I saw her walking away.) [transcription] Correct. *I saw her to walk away*. That sounds odd because I saw her she was walking. Something she was doing right now.

Some learners seemed prepared to guess, while others were not, although the reason why the learners had different attitudes toward guessing was not clear. In the example below, Learner 30 did not even know the meaning of the main verb, *avoid*. However, he made a correct judgment on this sentence based on pure guesswork and articulated a correct *ad hoc* explicit rule:

> [L30 S12] - (I avoided talking to him.) [transcription] Correct. I don't know the meaning of *avoid* but when I see this sentence, it looks good. We need *ing* form with this verb.

Learner 16 admitted that he tried to guess or relied on implicit knowledge when he was uncertain. He commented as follows:

> [L16 S5] - (I kept him to wait for me all day.) [transcription] ... because the rule is, some verbs ... they gave us a lot of verbs which they are going to be good with gerund or the other way. I don't remember all of the verbs, so sometimes, I try to guess or listening. I used my rule through listening.

Consequently, the learners' judgments were unstable as they tried to make definite judgments when they were not sure. Furthermore, as the example below demonstrates, the learners had tendency to accept sentences as grammatical when they were not sure.

> [L32 S23] - (She hoped learning Russian.) [transcription] Learner: I think this sounds good. Researcher: What is the rule? You said that your rule is to use infinitive. Is this sentence ok? Learner: No, I would use *she hoped to learn Russian*. Researcher: Why do you change your mind? Learner: I think that I will use infinitive form instead of gerundive form. Researcher: Why did you say this sentence is

> correct? Learner: Because I am not sure. Researcher: Your rule is? Learner: I will use infinitive form with this verb.

The same learner also accepted another sentence when he was uncertain.

> [L32 S24] - (I encouraged that they should speak in English.) [transcription] Learner: I would say *I encouraged them to speak English*. Researcher: Correct or incorrect? Learner: Maybe, it's correct but I am not sure. I think it is grammatically correct. The rule is, we can use relative sentence with *encourage*.

It should also be noted that sometimes the learners appeared to experience a conflict between their explicit knowledge and their intuitive feel for the grammaticality of a sentence (i.e., their implicit knowledge). Thus, according to Learner 39's explicit knowledge, main verbs that take an object should be followed by an infinitival complement. However, as the example below shows, he felt that sentence 32 (*I allowed her going to the party.*) was grammatical.

> [L39 S32] - (I allowed her going to the party.) [transcription] *Allow* use with gerund even though we have object here between *allow* and gerund but if ... some can use another form, *I allowed her to go*. I think it's correct.

In summary, the interview data indicate considerable confusion and indeterminacy in the learners' judgments. It is clear that they often resorted to guessing when required to make judgments. However, they rarely used a *not sure* option but instead tried to provide a definite judgment. Not surprisingly, then, the learners' judgments often appeared unstable, idiosyncratic, and illogical.

Summary

Considerable efforts were made to construct a test that would be reliable through piloting. However, the grammaticality judgment tests were not found to manifest a high level of reliability in this study. Also, the findings in this study did not support Gass' suggestion that reliability can be predicted by accuracy order. The internal consistency reliability of Timed GJTs 1 and 2 was rather low. The even lower internal consistency reliability of the Delayed GJT suggests that it may have been measuring more than a single general trait. The response pattern analyses also suggest some doubts about the extent to which grammaticality judgment data represent learners' grammatical knowledge. The learners appeared to be often uncertain about their judgments. However, they preferred to accept sentences and to guess rather than admit that they were not sure. All learners made a considerable number of changes (36.21%) in the two administrations of the Timed GJT.

The results of the relationship between the timed and delayed judgments suggested that the learners used different types of knowledge under different conditions. For the Timed GJT, the learners were more likely to use implicit knowledge because of time pressure. On the other hand, for the Delayed GJT, the learners appeared to use explicit knowledge because they had ample time available to focus on form, although, of course, it was possible that they also could have used implicit knowledge. The results, then, suggest that unpaced GJTs may not serve as accurate measure of learners' implicit knowledge. However, it is noted that the weak relationship between the timed and delayed versions of the GJT might have been due to measurement error given the low level of internal reliability reported for the two tests. Unfortunately the present study is incapable of making one explanation stronger over the other.

The interview data indicate considerable confusion and indeterminacy involved in making judgments. It should, however, be noted that verb complements can be considered highly complex and the conceptual difficulty involved in understanding their form-function mappings may have limited the learners' ability to explain rules involved. The learners often resorted to guessing and relied on their intuitive feel for the grammaticality of sentences. In addition, the learners appeared to use various strategies to cope with uncertainty. The results, then, support the argument that grammaticality judgments are a kind of performance data in which various factors as well as linguistic knowledge interact.

In general these results suggest that researchers should be aware that there is a problem of reliability in grammaticality judgment tests and should check the reliability of their instruments before reaching any conclusions based on data derived from them. Typically, SLA studies have not examined the reliability of grammaticality judgment tests. The results also suggest that it is difficult to determine what it is that learners actually attend to when making judgments and that it is doubtful that grammaticality judgment tests are valid as an instrument for investigating learners' knowledge of grammatical rules.

Chaudron (1983), in his comprehensive review of grammaticality judgment tests, suggested that "metalinguistic judgments in NSs and NNSs tend to be validated by other measures of performance" (p. 371). However, the present study did not support his claim. It is acknowledged that the sample size was small and only one type of grammaticality judgment tests was employed in the present study. Thus, there is the need to undertake similar studies with larger samples using a variety of grammaticality judgment tests such as multiple-choice and error detection type tests. There are many types of grammaticality judgment tasks. As a result, it is difficult to compare the results of different tasks. While some methodological suggestions are available (Chaudron, 1983; Bley-Vroman, Felix, and Ioup, 1988), little is known about which kind of task is best to use.

Notes

1. The descriptive statistics of the two groups on the three GJTs and the results of the MANOVA analysis for the overall group effect in the three GJTs were as follows:

Table N-1. Descriptive Statistics of the Two Groups on the Three GJTs

Timed GJT 1

Group	*N*	*Mean*	*Std Dev*	*Min.*	*Max.*
1	26	.5758	.1156	.3824	.7941
2	22	.5869	.1150	.3824	.7941

Timed GJT 2

Group	*N*	*Mean*	*Std Dev*	*Min.*	*Max.*
1	26	.6176	.1078	.3824	.8529
2	22	.6176	.1187	.3529	.8529

Delayed GJT

Group	*N*	*Mean*	*Std Dev*	*Min.*	*Max.*
1	26	.6934	.0861	.5294	.8235
2	22	.6925	.0920	.5294	.8235

Table N-2. MANOVA Statistics for the Three GJTs

Statistic	*Value*	*F*	*Num df*	*Den df*	*Pr > F*
Wilks' Lambda	.9960	.0590	3	44	.9810
Pillai's Trace	.0040	.0590	3	44	.9810
Hotelling-Lawley Trace	.0040	.0590	3	44	.9810
Roy's Greatest Root	.0040	.0590	3	44	.9810

* Multivariate Tests of Significance (S=1, M=0.5, N=21)

Univariate Analysis of the Group Effect (df=1;46)

	Timed GJT 1	*Timed GJT 2*	*Delayed GJT*
F	.11	.00	.00
Pr > F	.7411	1.0000	.9715

2. The researcher credits the idea of using a *chi*-square statistic to Dr. David Birdsong (personal communication, 1995).
3. It should be noted that the scores for some sentences in Timed GJT 1 manifest relatively little variance. It is, therefore, possible that more statistically significant reliability coefficients would have been found if there had been more variability on all the sentences in the test.
4. To be consistent with other learners, the learner was given the score of 0 on the Delayed GJT based on her judgment before the prompt provided by the researcher.

References

Bialystok, E. (1979). Explicit and implicit judgments of L2 grammaticality. *Language Learning*, *29*(1), 81-103.

Birdsong, D. (1989). *Metalinguistic performance and interlinguistic competence*. New York: Springer.

Bley-Vroman, R., Felix, S., & Ioup, G. (1988). The accessibility of universal grammar in adult language learning. *Second Language Research*, *4*(1), 1-32.

Bolinger, D. (1968). Entailment and the meaning of structures. *Glossa*, *2*(2), 119-127.

Burt, M., & Kiparsky, C. (1972). *A repair manual for English*. Rowley, MA: Newbury House.

Celce-Murcia, M., & Larsen-Freeman, D. (1983). *The grammar book*. Cambridge, MA: Newbury House.

Chaudron, C. (1983). Research on metalinguistic judgments: A review of theory, method and results. *Language Learning*, *33*(3), 343-377.

Ellis, R. (1990). Grammaticality judgments and learner variability. In R. Burmeister, & P. Rounds (Eds.), *Variability in second language acquisition: Proceedings of the Tenth Meeting of the Second Language Research Forum*, Vol.1 (pp. 25-60). Eugene, OR: University of Oregon, Department of Linguistics.

Ellis, R. (1991). Grammaticality judgments and second language acquisition. *Studies in Second Language Acquisition*, *13*(2), 161-186.

Garrett, H. (1965). *Testing for teachers* (2nd ed). American Book.

Gass, S. (1983). The development of L2 intuitions. *TESOL Quarterly*, *17*(2), 273-291.

Gass, S. (1994). The reliability of second-language grammaticality judgments. In E. Tarone, S. Gass, & A. Cohen (Eds.), *Research methodology in second-language acquisition* (pp. 303-322). Hillsdale, NJ: Lawrence Erlbaum Associates.

Hawkins, R., Towell, R., & Bazergui, N. (1993). Universal grammar and the acquisition of French verb movement by native speakers of English. *Second Language Research*, *9*(3), 189-233.

Hedgcock, J. (1993). Well-formed vs. ill-formed strings in L2 metalingual tasks: Specifying features of grammaticality judgments. *Second Language Research*, *9*(1), 1-21.

Mehrens, W., & Lehmann, I. (1973). *Measurement and evaluation in education and psychology.* New York: Holt, Rinehart and Winston.

Quirk, R., Greenbaum, S., Leech, G., & Svartvik, J. (1978). *A grammar of contemporary English*. London: Longman.

Schachter, J., & Yip, V. (1990). Why does anyone object to subject extraction? *Studies in Second Language Acquisition*, *12*(4), 379-392.

Sorace, A. (1985). Metalinguistic knowledge and language use in acquisition-poor environments. *Applied Linguistics*, *6*(3), 239-254.

Thorndike, E., & Lorge, I. (1944). *The teacher's word book of 30,000 words*. New York: Bureau of Publications, Teachers College of Columbia University.

Uziel, S. (1993). Resetting universal grammar parameters: Evidence from second language acquisition of subjacency and the empty category principle. *Second Language Research*, *9*(1), 49-83.

White, L. (1988). Island effects in second language acquisition. In S. Flynn, & W. O'Neil (Eds.), *Linguistic theory in second language acquisition* (pp. 144-172). Kluwer Academic Publishers.

White, L. (1989). *Universal grammar and second language acquisition*. Amsterdam: John Benjamins.

Appendix A

Grammaticality Judgment Test in the Pre-pilot Study

1. I want that you should go there.
2. I avoided that I should talk to him.
3. I now regret telling you that yesterday.
4. I reminded her visiting her mother.
5. I must remember putting out the trash tomorrow.
6. I reminded her to visit her mother.
7. He longed doing the work.
8. She stopped to take lessons.
9. She enjoyed to go to the movies.
10. I now regret to tell you that yesterday.
11. She stopped taking lessons.
12. He suggested me to go with him.
13. I must remember to put out the trash tomorrow.
14. They offered carrying the furniture.
15. He told them not to look at each other.
16. I expected him studying law.
17. He denied to say things like that.
18. I expected him to study law.
19. He told them not looking at each other.
20. I caught him stealing money.
21. He denied saying things like that.
22. I considered that I would go to the party.
23. I forgot mailing the letter yesterday.
24. She hoped learning Russian.
25. She enjoyed going to the movies.
26. I kept him to wait for me for an hour.
27. They offered to carry the furniture.
28. I considered going to the party.
29. I caught him to steal money.

30. I kept him waiting for me for an hour.
31. I avoided talking to him.
32. He suggested me going with him.
33. I forgot to mail the letter yesterday.
34. I want you to go there.
35. He longed to do the work.
36. She hoped to learn Russian.

Appendix B

Grammaticality Judgment Test in the Pilot Study

1. I encouraged them to speak in English.
2. I believed that the news was true.
3. I saw her walk away.
4. She admitted that she told lies.
5. He longed to do a challenging job.
6. He decided that he should visit his mother.
7. She hoped to learn Russian
8. He denied saying things like that.
9. He decided visiting his mother.
10. They offered carrying the furniture.
11. I saw her to walk away.
12. I kept him to wait for me all day.
13. I avoided talking to him.
14. He suggested taking the bus.
15. She enjoyed seeing the movies.
16. I believe the news being true.
17. She imagined her son to be a genius.
18. She expected her son studying law.
19. I caught him to steal money.
20. She admitted to tell lies.
21. I want you to go there.
22. I encouraged that they should speak in English.
23. I believed the news to be true.
24. I saw her walking away.
25. She admitted telling lies.
26. He longed doing a challenging job.
27. He decided to visit his mother.
28. She hoped learning Russian.
29. He denied to say things like that.
30. They offered to carry the furniture.
31. She hoped that she could learn Russian.
32. I kept him waiting for me all day.
33. I caught him stealing money.
34. I avoided that I should talk to him.
35. He suggested to take the bus.
36. She enjoyed to see the movies.
37. She expected her son to study law.
38. She imagined her son being a genius.
39. She imagined that her son was a genius.
40. He suggested that we should take the bus.
41. He denied that he said things like that.
42. I want that you should go there.

Appendix C

Grammaticality Judgment Test in the Main Study

1. He suggested taking the bus.
2. She expected him to study law.
3. I want you to go there.
4. He decided visiting his mother.
5. I kept him to wait for me all day.
6. She hoped to learn Russian.
7. I encouraged them to speak in English.
8. He decided that he should visit his mother.
9. I saw her walk away.
10. She admitted to tell lies.
11. They offered carrying the furniture.
12. I avoided talking to him.
13. She admitted that she told lies.
14. I saw her to walk away.
15. I allowed her to go to the party.
16. He denied saying things like that.
17. I caught him to steal money.
18. He suggested to take the bus.
19. She expected him studying law.
20. I want that you should go there.

21. They offered to carry the furniture.
22. I caught him stealing money.
23. She hoped learning Russian.
24. I encouraged that they should speak in English.
25. He decided to visit his mother.
26. I saw her walking away.
27. He denied that he said things like that.
28. She hoped that she could learn Russian.
29. I avoided that I should talk to him.
30. She admitted telling lies.
31. I kept him waiting for me all day.
32. I allowed her going to the party.
33. He denied to say things like that.
34. He suggested that we should take the bus.

Author

YOUNGJU HAN, Assistant Professor of English Department, Youngsan University, Address: San 150, Ungsang-eup, Yangsan-si, Kyungnam-do, 626-840, South Korea. Specializations: second language acquisition, particularly the role of instruction.

News and Views

Applied Language Learning
2000, Vol. 11, No. 1, pp. 205-209

The World From the Perspective of a Peripatetic Pedagogue

Betty Lou Leaver
Global Language Institute

Since leaving the Defense Language Institute a number of years ago, I have ventured out of the geographic paradise that those associated with the Institute call home. Where I have ended up might be considered "ends of the earth" in some cases. In fact, with the exception of populations like those found at DLI, many people could not trace my wanderings on a map. In the Southern Hemisphere I have done wide-ranging educational consultation in Brazil, participating (in very broken Portuguese, I must admit) in a discussion on state policies on foreign-language instruction at a conference in Rio de Janeiro at one point and at another point addressing 200 administrators on school violence in Sào Paulo—a topic that is a bit removed from teaching foreign language (but less so than one might think). From the East I have conducted faculty development with foreign-language teachers from Japan and Korea. In the West (excluding, of course, the United States, where I have also provided consultation to educational programs in several states), I have worked with government institutions and university professors on either side of the northern Alps, specifically in Garmisch, Germany, and Innsbruck, Austria. And in that land that is difficult to classify as either East or West—the former Soviet Union—I have conducted faculty development for a few thousand teachers in a number of cities in Russia, Belarus, Moldova, Ukraine, and Uzbekistan.

Per your editor's request, I have given some thought to the question: What is the link that connects all these places, some of them traditional travel routes for U. S. citizens and others rather exotic? While one might conduct some very specific studies to determine cause-and-effect relationships for all the surface phenomena I have encountered, on a much less scientific basis, I think the French can describe the link the most succinctly*: plus ça change, plus c'est la même chose*. Indeed, while each region has its own special, and rather interesting, traits that create sociological and philosophical differences, we are quickly becoming a unified world. One constant of that unified world is the unprecedented rate of change that all of us are experiencing in many aspects of life, education not excluded.

Many contemporary educational systems are caught in the turmoil of moving from a society where knowledge alone was sufficient to consider one to be educated and gave one sufficient tools to cope with the demands of that society, typically agrarian and industrial economies, to a situation where being able to problem-solve and invent are the keys to upward mobility, typically

service-oriented economies. As always, living on the moving plates of a social structure that is passing away and a social structure that is coming into being creates upheavals along the seams, as these plates pass each other, with conflict most often split along generational lines.

We in the United States went through this experience a couple of decades ago. The motivation was fueled by the Vietnam War and the accompanying cry of students for education that was "relevant." Interestingly, in many parts of Russia, this cry is being heard today. A dramatic change in social values there (as there was during the Vietnam War in the United States) has led to a re-examination of educational practice. In the United States this re-examination ended with the move toward a kind of education that focuses on teaching skills, rather than knowledge, and the handwriting on the wall in the former Soviet Union indicates that this may well happen there in the not-so-distant future. Already, many programs are incorporating Western teaching and testing practices; the latter not necessarily being an improvement over historical practices there.

In discussing issues of educational philosophy with teaching staffs around the world, most agree that they are, indeed, on the cusp of change, with part of the corpus of teachers and administrators being located on the "knowledge" plate and the other part on the "skills" plate. It does not seem to matter whether I am talking to a group of elementary school teachers or university foreign-language professors. The issues, questions, arguments—and fears—appear to be the same.

Of all the societies I have been involved with, the Europeans seem the most stable and secure in valuing knowledge for the sake of knowledge. Yet, in those countries, especially among foreign-language teachers, there is a strong understanding (as there has always been, given the proximity of so many countries in which so many different languages are spoken) that language study has a very pragmatic purpose. And while, in comparison with the United States, there is probably less teaching for communicative competence and more teaching for language knowledge taking place, at least according to the personal observations of this peripatetic pedagogue, there are, indeed, immense amounts of language acquisition that accompany the language learning experiences of students. Moreover, the opportunity for foreign-language classes to be taught by native speakers is high.

In Uzbekistan, by contrast, language acquisition is not often an option, except in the foreign-language classroom. While the more prestigious institutions are still locked into teaching language for the sake of knowledge, the Ministry of Education has made a commitment to teaching language via such contemporary approaches as content-based and task-based instruction and, indeed, at one point I conducted workshops on these approaches for regional ministry staffs that were in the process of reorganizing the national Uzbek language curriculum. Further, some of the private schools, such as the American Language Center in Tashkent, have made periodic use of some of the most cutting-edge approaches to foreign-language teaching in the world.

Former republics of the Soviet Union have enjoyed assistance from the U. S. Information Service and the private Open Society Initiative, along with similar aid from European and Asian countries, that has resulted in pockets of 21st century teaching in some of the most unexpected places. Teachers in Bukhara and Samarkand (Uzbekistan) talk knowledgeably about education philosophy; teachers in Almaty (Kazakhstan) propose new components of communicative competence and a cross-cultural means of understanding learning style differences. A K-11 laboratory school on the banks of the Yenisei River in Siberia (Russia) that is attached to the educational psychology department of the University of Krasnoyarsk outperforms nearly any U. S. elementary school I have seen. There, learner-centered instruction takes place not only in foreign-language classes, but also in math, science, Russian, and other subjects. A staff of school psychologists, trained in Jungian psychology and learning styles theory, assists teachers in determining causes for individual students' failure to learn. As for classroom methods, task-based instruction flourishes alongside a variety of methods focused on developing higher order thinking skills and critical thinking. The school director, a member of the Russian Academy of Pedagogical Sciences, is a leader in educational change in Russia and, a peripatetic pedagogue himself, routinely scours the world for the latest advances in teaching methods, which he evaluates and, where useful, incorporates into his school programs. Most of these methods focus on the individual learner and individual development, although not necessarily in the Rogerian sense.

Why the surfacing interest in learner-centered instruction? Perhaps a service-oriented economy forces all sectors of the economy to focus on the client and to try to meet each client's needs, including the consideration of students as clients. Perhaps, in that respect, the new millennium means a new path. Perhaps the increasing alienation of school children from the educational mainstream (situations in which children can make large sums of money on the streets through drug trade and other illegal diversions while schools focus on knowledge that seems irrelevant to these populations), a sociological phenomenon that has left few countries untouched, has required educational establishments to consider adapting their approaches to meet the needs of students instead of insisting that students conform to set practices of the institution. On the other hand, perhaps this interest in learner-centered instruction is not so new at all. In Russia, it is a new twist on an old theme: the development of the whole person as part of the greater society. What this peripatetic pedagogue finds interesting is that learner-centered approaches tend to be the node that ties together historical and contemporary ideas, and that node tends to be reinforced with a renewed interest in constructivism (first brought to Brazil, for example, in the 1970s by Paulo Freire and introduced in another form in Russia decades ago by Vygotsky and his suggestion of a Zone of Proximal Development).

As a result, foreign-language teaching practices are becoming more constructivist, with the very heart of the new constructivism being learner-centeredness. Not only are teachers more and more interested in adapting

lessons to accommodate students' learning profiles (i.e., set of learning styles), but they are also becoming more dedicated to fair testing (testing that is sensitive to learner differences) and to empowering students (increasing the number and appropriateness of learning strategies that students use). In all the countries I mentioned at the beginning of these notes, teachers have been aware of the topics of learning styles, learning strategies, and learner differences. Nowhere, even in the hinterlands, have I been a prophet bringing a new gospel. Further, teachers, especially those in the quiet, forgotten corners of the world, have been anxious to share ideas about teaching strategies, sometimes giving as much or more than getting. Much of the correspondence I receive from teachers in other hemispheres focuses on concepts of learner differences and the realization of these concepts in the foreign-language classroom.

At the same time, in foreign-language programs there is a rapidly increasing interest in content-based instruction (CBI) and task-based instruction (TBI). This is especially true for English language classrooms abroad. I have found excellent examples of CBI-TBI in places one would never anticipate to be so oriented, among them Chisinau in Moldova and the rural town of Goiània in northern Brazil. The most common subject-matter areas I have encountered in other countries have included culture, music, literature, economics, business, and history. However, some programs teach very specific content in English: financial management, legal affairs, science, and government, as well as other, more esoteric, topics. The most frequent requests for assistance with foreign-language faculty development that I have received have focused on content-based foreign-language classrooms.

What have I really learned from all my perambulations? More than anything else, I have learned that we share an increasingly smaller world. Ideas are parallel, and problems are similar. Yes, resources are different, as are historical backgrounds. However, we are all approaching a change in millennia, and we are becoming increasingly interdependent. That has created a need to understand each other's culture and to speak each other's language. English, of course, is becoming a worldwide lingua franca, and I would have to admit that many foreign-based English-language programs with which I have worked do a far better job of developing language proficiency in graduates than do U. S.-based foreign-language programs. Some of this can be explained by the context in which English is being studied: popular culture abroad often makes available English-language music, films, and television. Further, finding English-speaking colleagues is often quite easy (except in very rural countries). There is also a need felt for English in many places as a mechanism for upward mobility, travel, or job placement, combining a fair amount of integrative motivation with instrumental motivation. The interest, however, is more than anything else centered in the practice applications that result from language study. In this way, the contemporary view of foreign-language education abroad is similar to the contemporary view of foreign-language education at home.

If we are all so much alike, where do we differ? One of the greatest differences I have encountered is varying interpretation of the same ideas and words. The influence of U. S. thinking in education is strong, especially outside

Europe, and English-language terms have been adopted into a number of foreign languages as calques. This has resulted in terms being bandied about that have no inherent meaning for speakers of those other languages. For example, the term, *communicative approach* is used widely, but it does not always mean the same thing in all countries. In some instances, communicative approaches are considered those that include speaking activities in the curriculum. In other instances, the term refers to teaching methods designed to develop language proficiency, as opposed to language knowledge. There are many such terms, both in general education and in foreign-language education. The bottom line seems to be that we differ in how we define and implement commonly accepted concepts, and that makes eminent sense for we are all approaching the new millennium with a slightly different cultural history and somewhat different resultant values and needs.

Yet, even in these differences, we are nonetheless alike. We are all trying to make sense of our changing times. Arguments within our educational systems are fueled by the senior generation striving to pass along to the current generation dearly-held values, while the current generation strives to cope with near-daily changes in the skills needed for a changing society. Change—that is the common thread.

Author

BETTY LOU LEAVER, President, American Global Institute, Salinas, California.
Specializations: curriculum development, task-based instruction.

Reviews

Multisensory Structured Metacognitive Instruction: An Approach to Teaching a Foreign Language to At-risk Students. (1999). By Elke Schneider. Frankfurt am Main: Peter Lang. Pp. 305.

Reviewed by RENEE JOURDENAIS
Monterey Institute of International Studies

This book presents a dissertation case study of the use of multisensory structured metacognitive instruction (MSMI) to teach German as a foreign language to an at-risk learner.

Schneider begins with a historical overview of attitudes held regarding learning disabilities during the past century in both the US and Germany. She then presents a discussion of how language learning disabilities in "phonological and orthographic awareness," "grammatical awareness," and "morphological and semantic awareness" manifest themselves in learners' native language, and provides a brief presentation of research investigating the relationship between foreign language and native language ability, with a particular focus on the research done by Ganschow and Sparks.

Next, Schneider addresses the debate between whole-language approaches and "code emphasis" instruction, arguing that the communicative language classroom may not be providing at-risk learners with ample form-focused instruction. (This may be a valid fear in a strictly communicative approach, but one that tends not to be realized in a large majority of US foreign language classrooms.) This rationale leads Schneider to an overview of principles guiding the method employed in her study: Multisensory Structured Language Instruction (MSLI). She accompanies this discussion with an example of a multisensory structured language lesson, and the six learning phases involved. This is a fairly detailed description and provides the reader with a reasonably clear understanding of MSLI.

In Chapter 5, Schneider presents the multisensory structured metacognitive learning (MSML) materials she developed for the instruction of German as a second language. She has elaborated on previously employed materials by expanding to the morphological and grammatical domains, and by elaborating on the metacognitive functions of the materials. The materials are designed in such a way that the linguistic structures are presented to the learner from an "easy to more difficult" perspective. Schneider discusses the factors motivating the labeling of the various linguistic features in this manner, essentially involving the semantic transparency of the forms, syntactic derivations required, and contrast/similarity with English. While her discussions of these complexity categorizations are fairly well-developed for the phonological and morphological materials, the factors determining the grammatical complexity in her materials remain a bit vague. These rationales would be well-served by a discussion of recent research by de Graaff and Hulstijn, among others. To her credit, Schneider does acknowledge that learners

may have a need for more complex forms earlier in their learning, and does espouse altering the presentation of items accordingly, in order to meet the needs of the learner.

Examples of the materials are included. While they seem a bit complex at times from a metalinguistic perspective, as the goal of the materials is to increase metalinguistic knowledge on the part of the learner, perhaps this is appropriate. The method is notably non-communicative in nature and highly form-focused.

In Chapter Six, we meet her case study learner. This learner was chosen via learner questionnaire, interview, and instructor recommendation/ observation. The MLAT, as well as several additional tests of phonological discrimination (including one for German, developed by Schneider and a colleague), were administered in order to determine that this learner exhibited qualities consistent with language learning disabilities. The learner appeared to have difficulty with phonological discrimination of particular sounds.

The MSMI was presented to the learner over a 15-week period, and the learner was assessed at Week 5 and again at Week 15. In order to analyze the development of the learner's metacognitive skills during this time period, Schneider designed a process-oriented assessment tool to investigate his metacognitive processing. The criteria for this assessment are presented in the book.

Schneider noted a general increase in the learner's metacognitive skills over time, but as these were the skills essential to MSMI, and in fact, required during the exercises, this finding may be expected. The learner was also administered a four-skills test, the Dynamic Assessment of Metacognitive Skills Test (DAMST) (designed by Schneider and presented in some detail in the book), the two phonological discrimination exams, and a standard computerized multiple-choice test. While the learner responded favorably to the MSML instructional method, and his use of metacognitive strategies increased, there were no improvements noted in the learner's linguistic skills over the 16-week treatment period; in fact, his phonological discrimination performance decreased.

The author concludes that the research was successful in that the MSL approach was found to be adaptable to a foreign language (German), and that the MSML training helped to develop the learner's metalinguistic awareness. One might ask, however, how successful this method truly was if no improvement was noted in the learner's linguistic performance over this time period. Furthermore, whether or not we may even expect there to be a direct relationship between increased metalinguistic awareness and improved linguistic performance is questionable. Schneider also goes on to say that this method "could be applied to classroom settings" (218), but the one-on-one intense drilling required by the materials may not make such an approach very practical.

Overall, this book provides an interesting discussion of learning disabilities and their relationship with linguistic development — particularly of dyslexics (although, interestingly, the case study learner was not identified as

being dyslexic). The methodology and tasks utilized in the case study were clearly presented, and the coding system Schneider designed and utilized to assess metacognitive awareness is certainly of interest, as is the phonological discrimination task she developed for German. Caution must be used, however, as one reads the findings and conclusions. The increased metacognitive awareness on the part of the learner may have simply been due to increasing familiarity with the instructional method (as briefly acknowledged by the author), and it may not have further implications for language learning. Also, the fact that the one-on-one instruction provided with this method did not appear to impact this particular learner's linguistic abilities during the sixteen weeks of instruction does raise some questions as to the method's overall applicability.

Words and Rules: The Ingredients of Language. (1999). By Steven Pinker. Basic Books. Pp. 348. ISBN 0-465-07269-0.

Reviewed by SWATHI VANNIARAJAN
San Jose State University

Connectionists, particulary proponents of the Parallel Distribution Processing (hereafter PDP) models (McClelland & Rumelhart, 1986, Rumelhart & McClelland, 1986), contend that language is distributed in neurons in the brain's hardware. There are stronger and weaker connections among neurons. The relative strengths of the connections and the activation of neurons in sequence somehow creates an illusion that language is a rule-like system, though in reality, it may not. The advocates of PDP models further assume that language is represented in the brain hardware not as symbols representing phonemes, morphemes, words, phrases, clauses, S-nodes, or concepts as linguists claim but as bundles of (phonological) sound features. Through simulation experiments, McClelland & Rumelhart (1986) try to show that the PDP models can replicate the mental representation of language, mental processing of language, and importantly, even the unique child language acquisition processes such as the U-shaped behavior of past tense development in children learning English as a first language. With regard to the last, the thesis is that the human mind stores associations between the sounds of word stems and their past tense forms, and generalizes the associations to the learning of new words based on statistical frequency counts. For example, when the model is trained in '*talk-talked*,' the connections between '*-alk*' and '*-alked*' is strengthened, and when the model is asked to produce the past tense form of '*walk*,' it is able to produce the word '*walked*,' which is the correct form.

When the PDP experiments were published, they posed a threat to Chomskyan approaches to linguistics. Pinker, a clinical psychologist turned linguist, has made it his sole responsibility to defend the nativist position in public ever since. *Words and Rules* is the third in the series after the success of *The Language Instinct* (1994) and *How the Mind Works* (1997). Unlike the other two, *Words and Rules* deals with a lot more complex, technical, and

controversial subject matter. And Pinker has dual responsibility in this crusade against connectionism. He has to make the subject matter accessible to the larger reading public and at the same time, he must defend the linguists' assumption that the human mind is similar to a symbol manipulating computer, a position not readily acceptable to many scientists and psychologists. He does indeed succeed in his first task. The book is simple and readable. And this is the greatest merit of the book. He succeeds only partially in the second. The reason is that when he unwittingly states that there may be "a gradual continuum between memory and combination rather than two distinct mechanisms, with words at the memory end of the continuum and sentences at the combination end" (p. 13), readers are somewhat made to feel that the human mind may be both a symbol crunching computer as well as a pattern associator depending on what the input and the intended output are.

Pinker's arguments against the connectionist position can be summarized as follows: language is not as simple as the PDP models claim. Language is made of words and grammatical rules. Words and grammatical rules are learned and used in two different ways. Primarily, grammar is analyzing sequences of abstract symbols. The productivity and recursivity of grammar is the result of interaction between the combinatorial (formative and constructive) properties of abstract symbols in the grammatical systems and their exponential character (pp.6-8). For example, the morphology of verbs and nouns are the result of interactions among their lexical entries, categorical memberships (verb, noun, adverb), and their phonological representations. By treating words as a bundle of phonological features and doing away with the other (lexical, morphological, and syntactic) levels of language, Pinker argues, the PDP models can never succeed in explaining what the cognitive reality of language is like and what human intelligence is made of. Pinker further adds that language is so full of eccentric expressions that it is difficult to replicate the mental processes through pattern associations and frequency strengths aone. For example, an apartment infested with mice is *mice-infested*, but an apartment infested with rats is *rat-infested*. In one case, it is plural (*mice*), but in the other case, it is singular (*rat*). And there is no logical reasoning as to why it is so. Also, while the plural of *man* is *men*, the plural of *walkman* is *walkmans*, and not walkmen. While the past tense form of '*bake*' is '*baked*,' the past tense form of '*take*' is not '*taked*.'

Pinker's major defense of linguistic models, however, rests on arguments based on verb morphology. For him, the study of regular and irregular verbs is particularly important because such a study will be able to show that "irregular and regular verbs are contrasting specimens of words and rules in action" (p. 19). Pinker begins his defense with the claim that irregular verbs are phonologically chaotic and idiosyncratic. Regular verbs, on the other hand, are orderly, phonologically predictable, and can be produced by rules. What is important, however, is that "irregular families were once generated by rules but then accumulated idiosyncracies, and now they must be memorized individually" (p.283). In other words, "many irregular patterns are fossils of extinct rules that lived in the heads of speakers long ago" (p.84). The crux of

Pinker's argument is that the transformation of regular verbs into irregular verbs, and particularly the weakening of the number of strong irregular verbs from 365 in Old English to 83 in Modern English is a result of a number of linguistic events such as phonological changes (e.g. cluster reduction, devoicing, vowel shift, concentration of stress on the first syllables) over a period of hundreds of years, spelling reforms, verb formation rules, word-borrowing from other languages, confusions in the usage, and historical events resulting in contacts between English language and other languages. The basic argument is that all languages change, and only rules can explain how these changes took place. In other words, language change cannot be easily explained by pattern associators.

Pinker further cites clinical evidence which indicates that agrammatic patients who suffer from impaired grammatical processing are still able to process and produce the irregular verbs (p. 249). In contrast, those patients who suffer from Huntington's disease overapply rules and are not able to recollect the irregular past tense forms such as *bought*. Pinker argues on the basis of this evidence that it is possible that regular verbs and irregular verbs, the respective products of words and rules, are stored in different parts of the human brain.

Pinker caps his argument by showing that even nouns exhibit irregularities (pp. 26-27). Unlike irregular verbs, there are qualitative differences between regular and irregular nouns. If the goal of the PDP models is to explain away the linguistic rules as a by-product of the statistics of input, then they must be able to explain the production of irregular noun plurals along the irregular verbs; however, irregular noun plurals do not have their own distinctive sounds, and the PDP models, Pinker contends, would not be able to explain their morphology. "Irregular nouns are so well interspersed with their neighbors that no one can draw a line putting them on one side and the neighbors on the other" (p. 236).

Pinker adds that having done away with lexical entries in their input to pattern associators, the PDP models would have no way of knowing whether their outputs are right or wrong (p. 135), especially when there aren't any stem similarities between the present and past tense forms of certain irregular verbs such as '*go*' and its past tense '*went*.' "The model is an idiot savant tailored to do one task: generate the sound of a past-tense form" (p. 136). In fact, as Pinker rightly points out in many places, later experiments which attempted to replicate McClelland-Rumelhart models showed that pattern associators are unduly overpowerful in the production of regular verbs but inadequate for the production of irregular verbs.

Pinker concludes his defense by claiming that it is possible that irregular forms are stored in memory, and the regular forms are a product of rules. However, since the mind may not know whether a word is a regular form or an irregular form until the output is generated, the simple solution is that both words and rules are accessed in parallel. In the process, if a word can provide its own past tense from memory, the rule is blocked; elsewhere (by default), the rule applies (p. 17).

Pinker does not, however, entirely do away with the use of pattern associators in the mental processing of language. He claims that pattern associators enable human beings to register identical entries without which there will be a great deal of ambiguity in human communication. He also concedes that "symbol manipulation is not the only way the mind might work" (p. 88). Lastly, the compromise proposed by Pinker is as follows: "Regular verbs are computed by a rule that combines a symbol for a verb stem with a symbol for the suffix. Irregular verbs are pairs of words retrieved from the mental dictionary, a part of memory. Here is the twist: Memory is not a list of unrelated slots, like RAM in a computer, but is associative, a bit like the Rumelhart-McClelland pattern associator memory" (p. 117-118).

In my opinion, in spite of their eloquence, Pinker's arguments are misleading in many respects. For example, his dismissal of connectionism as behaviorism masquerading in a new form is questionable. He contends, "Replace Locke and Hume's 'ideas' or 'sensible qualities' with 'stimuli' and 'responses,' and you get the behaviorism of Ivan Pavlov, John B.Watson, and B. F. Skinner. Replace the ideas with 'neurons' and the associations with 'connections,' and you get the connectionism of David Rumelhart and James McClelland" (p. 89). Pinker's stand fails to acknowledge that connectionism also deals with the internal representation of language and that it considers cognition as a property emerging from the interactions of connected units in networks. Connectionism is more of a procedural model which attempts to work out the algorithms that transform the input into output. In fact, the algorithms used in the connectionist models are in some sense similar to the well-formedness constraints as proposed in Chomsky (1981). The models may be mismatching but are not as incompatible as linguists assume. Lastly, there is ample neural evidence to suggest that language may work by declarative knowledge and procedural knowledge (Squire, 1987). In that case, it is possible that what the linguists talk about is what is called declarative knowledge and what the connectionists talk about are what are called proceduralization processes.

One of the most glaring structural weaknesses of Pinker's argument is his failure to mention the counter-arguments provided by the connectionists (McClelland & Rumelhart 1986, Seidenberg, 1992) in defense of their cognitive orientation. This also makes the entire argument unscientific by failing to be unbiased.

In spite of its weaknesses, Pinker's *Words and Rules* is a significant contribution to the field of cognitive science, and is a valuable resource book for every scholar striving to unravel the mysteries of human mind. The personal interactive style of the author is particularly refreshing considering the abstractness of the subject matter and the circuitous nature of his arguments.

References

Chomsky, N. (1957). *Syntactic structures*. The Hague: Mouton.

Chomsky, N. (1965). *Aspects of the theory of syntax*. Cambridge, Mass.: MIT Press.

Chomsky, N. (1981). *Lectures on government and binding*. Dordrecht: Foris.
McClelland, J.L. and Rumelhart, D.E. (1985). Distributed memory and the representation of general and specific information. *Journal of Experimental Psychology: General*, 114, 159-88.
McClelland, J.L. and Rumelhart, D.E. (1986). *Parallel Distributed Processing 2.* Cambridge, MA.: MIT Press.
Pinker, S. (1988). On language and connectionism: Analysis of parallel distributed processing model of language acquisition. *Cognition*, 28, 73-193.
Rumelhart, D.E. and McClelland, J.L. (1986). *Parallel Distributed Processing 1*. Cambridge, MA.: MIT Press.
Seidenberg, M.S. (1992). Connectionism without tears. In S. Davies (ed.), *Connectionism: Theory and Practice*. Oxford University Press. pp.84-122.
Squire, L.R. (1987). *Memory and Brain*. Oxford University Press.

Talk It Up! Oral Communication for the Real World. (1998). By Joann Rishel Kozyrev. Boston: Houghton Mifflin. Pp. xvi + 144.

Talk It Over! Oral Communication for the Real World. (1998). By Joann Rishel Kozyrev. Boston: Houghton Mifflin. Pp. x + 150.

Reviewed by JOAN LESIKIN
William Paterson University

Talk It Up! Oral Communication for the Real World and *Talk It Over! Oral Communication for the Real World* are intended for intermediate and advanced academic ESL students, respectively. Each book contains eight thematic units for listening, speaking, and pronunciation. All tasks are integrated thematically and provide skills for academic work and everyday life. The chapter themes in *Talk It Up!* are: "Friends," "Feeling at Home," "Making Connections," "The World of Work," "School Choices/Life Opportunities," "Money Matters," "Help," and "Consumer Decisions." The themes in *Talk It Over!* are: "Roots: Living in Two Cultures," "Entertainment," "Environmental Activism," "The Sounds of Language," "Biotechnology," "Making It Work" (the music business), "Alternative Medicine," and "Television."

The author, Joann Rishel Kozyrev, approaches listening and speaking as related skills in both books. She regards fluency and accuracy as independent elements best learned by students focusing on one element at a time in both their own speech and through listening to others. While Kozyrev approaches oral communication systematically, she provides a great variety of tasks and resources which teachers and students should find intellectually stimulating and relevant to academic work. Tasks cover not only listening, speaking, and pronunciation but also academic skill building. Teachers who value a range of student tasks, a variety of student task groupings, student choice in tasks, a focus on language learning and academic strategies, high-level cognitive tasks, and student self-evaluations will welcome these textbooks and accompanying audio cassettes.

Talk It Up!

Each of the eight themes begins with an introductory section containing two or more tasks on the first listening passage topic. Some tasks are to be carried out individually, such as reading, filling in, or viewing information presented in short readings, ads, charts, or pictures and selecting an appropriate choice, answering questions, or summarizing results of a discussion. Other tasks are accomplished in groups or with a partner, such as discussing, listing, comparing, or sharing answers.

One of three listening passages and accompanying tasks follow. The tasks are for before, during, and after listening and are carried out both individually and in groups. Different tasks provide for repeated listening for different purposes. The first listening tasks in each chapter lead into a focus on accuracy in pronunciation based on the listening passage. After the pronunciation focus, a "Talk It Up!" section provides tasks related to the listening passage content and aimed at increasing fluency such as role play, discussion, predicting, answering questions, giving directions, and debating for individual, partner, or group work.

The sequence of listening, pronunciation accuracy, and fluency practice are repeated, using a related topic in a second listening passage and different tasks and resources. The second "Talk It Up!" tasks stress interactions with people both outside and inside the classroom, such as interviewing shoppers, a store employee, and a class visitor such as a police officer or a firefighter. Some are solely listening tasks, such as watching and analyzing TV shows or calling telephone information systems.

The pronunciation tasks in *Talk It Up!* focus on syllables, contractions, sentence stress, intonation, focal stress in sentences, consonant clusters, linking, and a variety of phonemes. They proceed from controlled exercises to tasks which are student-generated. For example, in one series of tasks, students first distinguish a particular pronunciation feature such as contracted words (e.g., *we're*); second, they repeat the feature after hearing the speaker on the tape. Third, one student reads a passage using contradictions while a partner fills in blanks with the long form; fourth, students each write their own individual paragraphs, finding all words which can be contracted and practices reading the paragraph while contracting the words. Last, students rewrite their own paragraphs leaving blanks for where the contractions should be so that a partner can fill in the contractions.

The third listening is followed by a "Further Practice" section which includes additional tasks emphasizing fluency and offering practical educational and social skills, such as agreeing and disagreeing, giving advice, or presenting proper etiquette. The third and last listening passage in each chapter, also related to the chapter theme, also contains before, during, and after listening tasks which can be carried out individually, with a partner, or in groups. Different tasks provide for repeated listening for different purposes, such as choosing the correct answer, writing answers to questions, discussing information, taking notes. The listening tasks become progressively more challenging within a

chapter by means of increased number of speakers, increased speed and relaxed forms of speech, and/or increased passage length.

At the end of every two chapters in the "Further Practice" section, *Talk It Up!* contains a pretest on pronunciation and fluency and self-evaluations based on the pre-test. Evaluations focus on areas needing improvement and student selection of the next focus for practice. Fluency evaluation concentrates on unnatural pausing and difficulty with word choice; pronunciation evaluation centers on problems with sounds, stress, and intonation.

Talk It Over!

Talk It Over! is as methodically designed as *Talk It Up!* and has a great variety of tasks and resources for the more advanced learner. Each theme typically begins with an introduction containing two tasks. The first is either to freewrite, tape record, or discuss responses to supplied questions or prompts. The second task has students discussing supplied questions or prompts based on a reading passage, a completed graph, or a chart or questionnaire to be completed by students. The seventh chapter has one introductory task; students read, take notes, and then discuss supplied questions.

Following the introduction is one of two listening passages and tasks for before, during, and after listening. The tasks include both solitary and interactive activities as well as instruction in strategies to obtain complete information and practice in various forms of note taking, such as idea mapping, outlining, the Cornell Method, paragraph style, and listing.

Each chapter subsequently contains one pronunciation focus. The examples are drawn from the listening passage; the tasks providing controlled pronunciation practice are linked to each chapter's speaking tasks. The pronunciation tasks begin with careful listening to an excerpt from the listening passage for the purpose of understanding and then producing suprasegmentals: intonation to signal complete and incomplete thoughts and in questions and statements, syllable stress in words, rhythm and sentence stress, thought groups, features of fast speech, or enunciation. The pronunciation focus is reinforced by having students both listen to classmates' and their own speech in relation to both content and language in carrying out tasks.

A second, related listening passage follows a typical pattern of pre-listening tasks, tasks for global listening, and tasks requiring listening for details. As a rule, tasks for after listening require students to consider insights from both listening passages.

The next chapter section entitled "Talk It Over!" contains speaking tasks aimed at developing both fluency and accuracy. Tasks build on the ideas and types of communication presented in the listening passages: discussion skills, asking and answering questions, participating in a town meeting, presenting to a small group, presenting as a group, speaking persuasively, formal presenting, and defending an opinion.

The penultimate chapter section "Further Practice" presents additional, related listening and speaking tasks. Listening tasks utilize television, the Internet, radio, and a live lecture, as well as re-listening to a chapter's second listening passage. Speaking tasks include interviewing, role playing, discussion, writing, calling, surveying, story telling, and responding to a reading.

Self-evaluations are at the end of each chapter as well as in the appendix for both individual and group evaluations. The evaluations cover different aspects of notetaking (e.g., listing, abbreviating, outlining, summarizing), speaking (e.g., answering and asking questions, participation in group problem solving or presentations) and pronunciation (e.g., intonation, focal stress, rhythm and stress).

Conclusion

While both books have self-evaluations, unlike *Talk It Up!*, *Talk It Over!* does not have a pretest. A pretest would provide a helpful baseline. Another weakness found in both books is the absence of an answer key for those tasks that clearly have one right answer such as true/false and multiple-choice questions, matching tasks, and responses to comprehension-type questions asked about information in listening passages. The presence of an answer key would give students more control over feedback to tasks done individually and which do not provide for comparing answers with classmates.

The sample cassette tape did not cover every listening passage, but those excerpts included were clear and distinct. Some speakers are not native English speakers and infrequently use non-standard forms, such as in chapter one of *Talk It Over!*, a Korean speaker says, " . . .if I will have English here" and a Venezuelan pronounces "ladder" as "lather" several times. These non-standard forms did not bother this reviewer. If they are heard by students, the mispronunciations and grammatical errors can be discussed, although they are not mentioned in the textbook. In any case, the speakers are positive role models of assured speakers of other languages using English with strong presence and identity.

Teachers who value teaching students to be independent learners will find the books attractive since activities for decision making, for opining on subjects, for self-evaluation, and for group work are plentiful. At the same time, tasks where students work individually at skill building are abundant; many of these tasks are followed by group work, such as discussion, which can provide feedback as well as fluency experience after students work in isolation. The presence in both books of a variety of graphic organizers for students to complete is highly commendable. These charts help students understand, organize, or recall information in order to retain and apply the information to writing, discussion, or evaluation. *Talk It Up! Oral Communication for the Real World* and *Talk It Over! Oral Communication for the Real World* are excellent frameworks for the development of oral communication skills. The books and accompanying cassettes are welcome additions to the academic ESL classroom.

Composición Práctica (2nd ed.). (1999). By Trinidad González and Joseph Farrell. New York: John Wiley & Sons. Pp. 285, paper, ISBN 0-471-23969-0.

Reviewed by GORDON L. JACKSON
Defense Language Institute Foreign Language Center

As its title indicates, *Composición práctica* takes a practical approach to composition, focussing on the kinds of writing students are likely to employ in their everyday social or professional life, from simple notes to term papers. Written primarily in Spanish, and at a level used by educated writers, the book contains a preliminary lesson devoted to dictionaries and their usage, twelve chapters on a variety of topics (la educación superior; la familia; la rutina diaria; la comida; ¡un buen anuncio publicitario!; el reportaje a su alcance; las diversiones, los pasatiempos y los compromisos sociales; la amistad; el mundo de los negocios; en busca de tiempos idos; dilemas ecológicos; artistas del mundo hispano), and several appendices. Most of the latter provide information students can use to polish the form of their writing (syllabification and diphthongs, stress and written accents, capitalization, punctuation, documentation and bibliography). The final appendix is a list of correction symbols the instructor can employ in providing feedback to students. An Instructor's Manual is available upon request.

Although not overtly designed for specific proficiency levels, the text affords students practice analyzing and writing a variety of prose text types: advertisements, news reports, personal invitations and notes, personal letters, memoranda, business letters, narratives, descriptions, commentaries on issues, and the essay/research paper. All of the examples of prose writing included by the authors are authentic texts.

Each chapter forms a self-contained unit that can be studied out of sequence as needed or desired. Only the last chapter deviates slightly from a standard format that includes the following sections: chapter objectives; vocabulary; analysis of the text type treated in the chapter; authentic writing model and prewriting activities; review, in English, of grammar points relevant to the chapter's writing task; the writing task itself; an Internet exercise; and a "Querido diario" (Dear Diary) section intended to encourage students to write about their own experience.

The inclusion of an Internet exercise in each chapter adds to the contemporary flavor of the text. Stored at the publisher's website, the exercises require the student to access other sites to complete them. Although the user may occasionally find that a site is not available or has changed in some way, this feature of the text is still extremely valuable, as it provides access to a wealth of additional culturally authentic material that will appeal to a wide variety of interests.

The text is very well written and attractively illustrated. There are virtually no typographical errors, and the only infelicity in content that this reviewer noted was the absence, in the appendix on syllabification, of any reference to words that contain a /tl/ sequence (e.g., "Atlántico").

The text presupposes access to a good bilingual dictionary and a good command of the basics of Spanish grammar. Although the grammatical explanations in each chapter are relevant, concise and to the point, they are not intended to provide a comprehensive grammar review. Students should therefore have a good reference grammar at hand.

The book lives up to its name not only in the text types addressed, but also in the guidance it provides to the students, from adding variety to their writing by incorporating compound and complex sentences, to structuring paragraphs, to organizing essays and term papers. The authors' advice on using dictionaries and reviewing successive drafts of a document is particularly sage.

All in all, *Composición práctica* is a very good textbook that is well suited for the advanced (third and fourth year) undergraduate level in colleges and universities. Teachers at those levels will find it well worth examining.

General Information

Calendar of Events

2000

7-10 September, *Second Language Research Forum,* Madison. Information SLRF Committee, 7187 Helen C. White Hall, 600 N. Park St., Madison, WI 53706-1475; Email [slrf2000@studentorg.wisc.edu], Web [http://mendota.english.wisc.edu/~SLRF/].

16-17September, *Polonophilia and Polonophobia of the Russians,* Bloomington. Information Russian and East European Institute, Indiana University, Ballantine Hall 565, Bloomington, IN 47405; Fax (812)855-6411, Email [reei@indiana.edu].

28-30 September, *Luso-Hispanic Humor Studies, Montreal.* Information K. M. Sibbald, Department of Hispanic Studies, McGill University, 680 Sherbrooke Street West, Room 385, Montreal, Quebec H3A 2M7; (514)398-6683, Fax (514)398-3406, Email [ksibbald@leacock.lan.mcgill.ca].

2-4 November, *Foreign Language Association of North Carolina,* High Point, NC. Information Debra S. Martin, Executive Director, PO Box 19153, Asheville NC 28815; (828)686-4985, Fax (828)686-3600, Email [martintl@interpath.com].

3-4 November, *National Association of Self-Instructional Language Programs,* Washington. Information Alexander Dunkel, NASILP Executive Director, Critical Languages Program, 1717 E. Speedway Blvd., Suite 3312, The University of Arizona, Tucson AZ 85721-0151; (520)626-5258, Fax (520)626-8205, Email [adunkel@u.arizona.edu].

9-12 November, *American Association for the Advancement of Slavic Studies,* Denver. Info: AAASS; Email [walker@core-mail.fas.harvard.edu].National Association of District Supervisors of Foreign Languages, 15-16 November, Boston. Information Loretta Williams, Plano ISD, 150 Sunset, Plano TX 75075; (972)519-8196, Fax (972)519-8031, Email [lwillia@pisd.edu].

16 November, *American Association of Teachers of Arabic,* Orlando. Information John Eisele, Department of Modern Languages & Literature, College of William and Mary, Williamsburg, VA 23187-8795; (757)221-3145, Email [jceise@facstaff.wm.edu].

16-19 November, *American Association of Teachers of Turkic Languages with Middle East Studies Association,* Orlando. Information AATT, 110 Jones Hall, Princeton University, Princeton NJ 08544-1008; (609)258-1435, Fax (609)258-1242, Email [ehgilson@princeton.edu], Web [www.princeton.edu/~ehgilson/aatt.html].

---

*Courtesy of the *Modern Language Journal* (University of Wisconsin)

17-19 November, *American Council on the Teaching of Foreign Languages,* Boston. Information ACTFL, 6 Executive Plaza, Yonkers, NY 10701-6801; (914)963-8830, Fax (914)963-1275, Email [actflhq@aol.com], Web [http://www.actfl.org].

17-19 November, *American Association of Teachers of German,* Boston. Information AATG, 112 Haddontowne Court #104, Cherry Hill, NJ 08034; (856)795-5553, Fax (856)795-9398, Email [aatg@bellatlantic.net], Web [http://www.aatg.org].

17-19 November, *Chinese Language Teachers Association,* Boston. Information CLTA, 1200 Academy Street, Kalamazoo, MI 49006; (616)337-7001, Fax (616)337-7251, Email [clta@kzoo.edu], Web [http://www.clta.deall.ohio-state.edu].

29 November-1 December, *Online Educa Berlin,* Berlin. Information ICEF Berlin, Sylke Sedelies, Niebuhrstr. 69A, D10629 Berlin, Germany; +49-30-3276140, Fax +49-30-3249833, Email [sylke.sedelies@icef.com, Web [www.online-educa.com].

27-30 December, *Modern Language Association of America,* Washington. Information MLA, 10 Astor Place, New York, NY 10003-6981; Fax (212)477-9863, Email [convention@mla.org].

27-30 December, *North American Association of Teachers of Czech,* Washington, Information George Cummins III, German and Russian, Tulane University, New Orleans, LA 70118; (504)899-7915, Fax (504)865-5276, Email [gcummins@mailhost.tcs.tulane.edu].

27-30 December, *American Association of Teachers of Slavic & East European Languages and American Council of Teachers of Russian,* Washington. Information AATSEEL, 1933 N. Fountain Park Dr., Tucson, AZ 85715; Fax (520)885-2663, Email [aatseel@compuserve.com], Web [http://clover.slavic.pitt.edu/~aatseel/].

2001

4-7 January, *Linguistic Society of America,* Washington, D.C. Information Margaret Reynolds, LSA, 1325 18th St, NW, Suite 211, Washington, DC 20036; (202)835-1714, Fax (202)835-1717, Email [lsa@lsadc.org], Web [www.lsadc.org].

24-27 February, *American Association of Applied Linguistics,* St. Louis. Information AAAL, PO Box 21686, Eagan, MN 55121-0686; (612)953-0805, Fax (612)431-8404, Email [aaaloffice@aaal.org], Web [http://www.aaal.org].

27 February-3 March, *Teachers of English to Speakers of Other Languages,* St. Louis. Information TESOL, 700 South Washington Street, Suite 200, Alexandria, Virginia 22314; (703)836-0774, Fax (703)836-7864, Email [conv@tesol.edu], Web [www.tesol.edu].

8-10 March, *Southern Conference on Language Teaching Joint Conference with South Carolina Foreign Language Teachers Association,* Myrtle Beach. Information Lynne McClendon, SCOLT Executive Director, 165 Lazy Laurel Chase, Roswell, GA 30076; (770)992-1256, Fax (770)992-3464, Email [lynnemcc@mindspring.com].

15-17 March, *Ohio Foreign Language Association,* Akron. Information Bob Ballinger, OFLA, 766 Ashler Ct., Worthington OH 43085; Email [treevid@megsinet.net].

26-29 April, *Northeast Conference on the Teaching of Foreign Languages,* New York. Information Northeast Conference, Dickinson College, PO Box 1773, Carlisle, PA 17013-2896; (717)245-1977, Fax (717)245-1976, Email [nectfl@dickinson.edu], Web [www.dickinson.edu/nectfl].

26-28 April, *Central States Conference on the Teaching of Foreign Languages,* Indianapolis. Information Diane Ging, PO Box 21531, Columbus, OH 43221-0531; (614)529-0109, Fax (614)529-0321, Email [dging@iwaynet.net].

23-26 May, *International Association for Language Learning Technology,* Houston. Information Claire Bartlett, Language Resource Center, Rice University, MS 37, Houston, TX 77251-1892; (713)737-6157, Fax (713)737-6168, Email [bartlett@rice.edu], Web [http://iall.net].

5-8 July, *American Association of Teachers of French,* Denver. Information Jayne Abrate, AATF, Mailcode 4510, Southern Illinois University, Carbondale, IL 62901-4510; (618)453-5731, Fax (618)453-5733, Email [abrate@siu.edu], Web [http://aatf.utsa.edu/].

4-8 July, *American Association of Teachers of Spanish & Portuguese,* San Francisco. Information AATSP, Butler-Hancock Hall #210, University of Northern Colorado, Greeley, CO 80639; (970)351-1090, Fax (970)351-1095, Email [lsandste@bentley.unco.edu].

14-15 November, *National Association of District Supervisors of Foreign Languages,* Washington. Information Loretta Williams, Plano ISD, 150 Sunset, Plano TX 75075; (972)519-8196, Fax (972)519-8031, Email [lwillia@pisd.edu].

16-18 November, *American Council on the Teaching of Foreign Languages,* Washington. Information ACTFL, 6 Executive Plaza, Yonkers, NY 10701-6801; (914)963-8830, Fax (914)963-1275, Email [actflhq@aol.com], Web [http://www.actfl.org].

16-18 November, *American Association of Teachers of German,* Washington. Information AATG, 112 Haddontowne Court #104, Cherry Hill, NJ 08034; (856)795-5553, Fax (856)795-9398, Email [aatg@bellatlantic.net], Web [http://www.aatg.org].

16-18 November, *Chinese Language Teachers Association,* Washington. Information: CLTA, 1200 Academy Street, Kalamazoo, MI 49006; (616)337-7001, Fax (616)337-7251, Email [clta@kzoo.edu], Web [http://www.clta.deall.ohio-state.edu].

17 November, *American Association of Teachers of Arabic,* San Francisco. Information John Eisele, Department of Modern Languages & Literature, College of William and Mary, Williamsburg, VA 23187-8795; (757)221-3145, Email [jceise@facstaff.wm.edu].

17-20 November, *American Association of Teachers of Turkic Languages with Middle East Studies Association,* San Francisco. Information AATT, 110 Jones Hall, Princeton University, Princeton, NJ 08544-1008; (609)258-1435, Fax (609)258-1242, Email [ehgilson@princeton.edu], Web [www.princeton.edu/~ehgilson/aatt.html].

27-30 December, *Modern Language Association of America,* location to be announced. Information MLA, 10 Astor Place, New York, NY 10003-6981; Fax (212)477-9863, Email [convention@mla.org].

27-30 December, *North American Association of Teachers of Czech,* location to be announced. Information George Cummins III, German and Russian,Tulane University, New Orleans, LA 70118; (504)899-7915, Fax (504)865-5276, Email [gcummins@mailhost.tcs.tulane.edu].

27-30 December, *American Association of Teachers of Slavic & E. European Languages and American Council of Teachers of Russian,* location to be announced. Information AATSEEL, 1933 N. Fountain Park Dr., Tucson, AZ 85715; Fax (520)885-2663, Email [aatseel@compuserve.com], Web [http://clover.slavic.pitt.edu/~aatseel/].

2002

3-6 January, *Linguistic Society of America,* San Francisco. Information Margaret Reynolds, LSA, 1325 18th St, NW, Suite 211, Washington, DC 20036; (202)835-1714, Fax (202)835-1717, Email [lsa@lsadc.org], Web [www.lsadc.org].

21-23 March, *Central States Conference on the Teaching of Foreign Languages,* Kansas City, MO. Information Diane Ging, PO Box 21531, Columbus, OH 43221-0531; (614)529-0109, Fax (614)529-0321, Email [dging@iwaynet.net].

6-9 April, *American Association of Applied Linguistics,* Salt Lake City. Information AAAL, PO Box 21686, Eagan, MN 55121-0686; (612)953-0805, Fax (612)431-8404, Email [aaaloffice@aaal.org], Web [http://www.aaal.org].

9-13 April, *Teachers of English to Speakers of Other Languages,* Salt Lake City, Utah. Information TESOL, 700 South Washington Street, Suite 200, Alexandria, Virginia 22314; (703)836-0774, Fax (703)836-7864, Email [conv@tesol.edu], Web [www.tesol.edu].

2-5 May, *Northeast Conference on the Teaching of Foreign Languages,* New York. Information Northeast Conference, Dickinson College, PO Box 1773, Carlisle, PA 17013-2896; (717)245-1977, Fax (717)245-1976, Email

20-21 November, *National Association of District Supervisors of Foreign Languages,* Salt Lake City. Information Loretta Williams, Plano ISD, 150 Sunset, Plano TX 75075; (972)519-8196, Fax (972)519-8031, Email [lwillia@pisd.edu].

22-24 November, *American Council on the Teaching of Foreign Languages,* Salt Lake City. Information ACTFL, 6 Executive Plaza, Yonkers, NY 10701-6801; (914)963-8830, Fax (914)963-1275, Email [actflhq@aol.com], Web [http://www.actfl.org].

22-24 November, *American Association of Teachers of German,* Salt Lake City Information AATG, 112 Haddontowne Court #104, Cherry Hill, NJ 08034; (856)795-5553, Fax (856)795-9398, Email [aatg@bellatlantic.net], Web [http://www.aatg.org].

22-24 November, *Chinese Language Teachers Association,* Salt Lake City. Information CLTA, 1200 Academy Street, Kalamazoo, MI 49006; (616)337-7001, Fax (616)337-7251, Email [clta@kzoo.edu], Web [http://www.clta.deall.ohio-state.edu].

23 November, *American Association of Teachers of Arabic,* Washington. Information John Eisele, Department of Modern Languages & Literature, College of William and Mary, Williamsburg, VA 23187-8795; (757) 221-3145, Email [jceise@facstaff.wm.edu].

23-26 November, *American Association of Teachers of Turkic Languages with Middle East Studies Association,* Washington. Information AATT, 110 Jones Hall, Princeton University, Princeton, NJ 08544-1008; (609)258-1435, Fax (609)258-1242, Email [ehgilson@princeton.edu], Web [www.princeton.edu/~ehgilson/aatt.html].

27-30 December, *Modern Language Association of America,* location to be announced. Information MLA, 10 Astor Place, New York, NY 10003-6981; Fax (212) 477-9863, Email [convention@mla.org].

27-30 December, *North American Association of Teachers of Czech,* location to be announced. Information George Cummins III, German and Russian, Tulane University, New Orleans, LA 70118; (504)899-7915, Fax (504)865-5276, Email [gcummins@mailhost.tcs.tulane.edu].

27-30 December, *American Association of Teachers of Slavic & E. European Languages and American Council of Teachers of Russian,* location to be announced. Information AATSEEL, 1933 N. Fountain Park Dr., Tucson, AZ 85715; Fax (520)885-2663, Email [aatseel@compuserve.com], Web [http://clover.slavic.pitt.edu/~aatseel/].

Information for Contributors

Statement of Purpose

The purpose of *Applied Language Learning* (*ALL*) is to increase and promote professional communication within the Defense Language Program and academic communities on adult language learning for functional purposes.

Submission of Manuscripts

The Editor encourages the submission of research and review manuscripts from such disciplines as: (1) instructional methods and techniques; (2) curriculum and materials development; (3) testing and evaluation; (4) implications and applications of research from related fields such as linguistics, education, communication, psychology, and social sciences; (5) assessment of needs within the profession.

Research Article

Divide your manuscript into the following sections:

- Abstract
- Introduction
- Method
- Results
- Discussion
- Conclusion
- Appendices
- Notes
- References
- Acknowledgements
- Author

Abstract
Identify the purpose of the article, provide an overview of the content, and suggest findings in an abstract of not more than 200 words.

Introduction
In a few paragraphs, state the purpose of the study and relate it to the hypothesis and the experimental design. Point out the theoretical implications of the study and relate them to previous work in the area.

Next, under the subsection *Literature Review,* discuss work that had a direct impact on your study. Cite only research pertinent to a specific issue and avoid references with only tangential or general significance. Emphasize pertinent findings and relevant methodological issues. Provide the logical continuity between previous and present work. Whenever appropriate, treat controversial issues fairly. You may state that certain studies support one conclusion and others challenge or contradict it.

Method

Describe how you conducted the study. Give a brief synopsis of the method. Next develop the subsections pertaining to the *participants,* the *materials,* and the *procedure.*

Participants. Identify the number and type of participants. Specify how they were selected and how many participated in each experiment. Provide major demographic characteristics such as age, sex, geographic location, and institutional affiliation. Identify the number of experiment dropouts and the reasons they did not continue.

Materials. Describe briefly the materials used and their function in the experiment.

Procedure. Describe each step in the conduct of the research. Include the instructions to the participants, the formation of the groups, and the specific experimental manipulations.

Results

First state the results. Next describe them in sufficient detail to justify the findings. Mention all relevant results, including those that run counter to the hypothesis.

Tables and figures. Prepare tables to present exact values. Use tables sparingly. Sometimes you can present data more efficiently in a few sentences than in a table. Avoid developing tables for information already presented in other places. Prepare figures to illustrate key interactions, major interdependencies, and general comparisons. Indicate to the reader what to look for in tables and figures.

Discussion

Express your support or nonsupport for the original hypothesis. Next examine, interpret, and qualify the results and draw inferences from them. Do not repeat old statements: Create new statements that further contribute to your position and to readers understanding of it.

Conclusion

Succinctly describe the contribution of the study to the field. State how it has helped to resolve the original problem. Identify conclusions and theoretical implications that can be drawn from your study.

Appendices
Place detailed information (for example, a table, lists of words, or a sample of a questionnaire) that would be distracting to read in the main body of the article in the appendices.

Notes
Use them for substantive information only, and number them serially throughout the manuscript. They all should be listed on a separate page entitled *Notes*.

References
Submit on a separate page of the manuscript a list of references with the centered heading: *References*. Arrange the entries alphabetically by surname of authors. Review the format for bibliographic entries of references in the following sample:

> Dulay, H., & Burt, M. (1974). Errors and strategies in child second language acquisition. *TESOL Quarterly*, *16* (1), 93-95.
> Harris, D. P. (1969). *Testing English as a second language*. New York: McGraw-Hill.

List all works cited in the manuscripts in *References*, and conversely, cite all works included in *References* in the manuscript. Include in reference citations in the text of the manuscript the name of the author of the work cited, the date of the work, and when quoting, the page numbers on which the materials that you are quoting originally appeared, e.g., (Jones, 1982, pp. 235-238).

Acknowledgments
Identify colleagues who contributed to the study and assisted you in the writing process.

Author
Type the title of the article and the author's name on a separate page to ensure anonymity in the review process. Prepare an autobiographical note indicating: full name, position, department, institution, mailing address, and specialization(s). Example follows:

> JANE C. DOE, Assistant Professor, Foreign Language Education, University of America, 226 N. Madison St, Madison, WI 55306. Specializations: foreign language acquisition, curriculum studies.

Review Article

It should describe, discuss, and evaluate several publications that fall into a topical category in foreign language education. The relative significance of the publications in the context of teaching realms should be pointed out. A review article should be 15 to 20

double-spaced pages.

Review

Submit reviews of textbooks, scholarly works on foreign language education, dictionaries, tests, computer software, video tapes, and other non-print materials. Point out both positive and negative aspects of the work(s) being considered. In the three to five double-spaced pages of the manuscript, give a clear but brief statement of the work's content and a critical assessment of its contribution to the profession. Keep quotations short. Do not send reviews that are merely descriptive.

Manuscripts are accepted for consideration with the understanding that they are original material and are not being considered for publication elsewhere.

Specifications for Manuscripts

All editorial correspondence, including manuscripts for publication should be sent to:

Applied Language Learning
ATFL-AP-AJ
ATTN: Editor (Dr. L. Woytak)
Defense Language Institute
Foreign Language Center
Presidio of Monterey, CA 93944-5006

Manuscripts should be typed on one side only on 8-1/2 x 11 inch paper, double-spaced, with ample margins. Subheads should be used at reasonable intervals. Typescripts should typically run from 10 to 30 pages.

All material submitted for publication should conform to the style of the *Publication Manual of the American Psychological Association* (4th Ed., 1994) available from the American Psychological Association, P. O. Box 2710, Hyattsville, MD 20784.

Review Process

Manuscripts will be acknowledged by the editor upon receipt and subsequently sent to at least two reviewers whose area of expertise includes the subject of the manuscript. *Applied Language Learning* uses the blind review system. The names of reviewers will be published in the journal annually.

Specifications for Floppy Disks

Preferably use Windows-based software. Format manuscripts produced on one of the DOS-based or Macintosh systems, as an ASQII file at double density, if possible. Please name the software used. MS Word or text documents preferred.

Copyright

NOTES

PIN NUMBER: 077508 1/N 000

Applied Language Learning
Comment Card

We are always interested in hearing from our readers. Please use this card to comment on this issue: _____.
Volume Number Date

Tear Out and Remove

MARK ONE
- ☐ New Subscription
- ☐ Address Change

PLEASE PRINT

Rank/Title First Name Middle Initial Last Name

Institution Division Department

Street City State/Country Zip Code

Tear Out and Remove

From:

_____

_____

_____

Official Business

Place
Stamp
Here

Applied Language Learning
Defense Language Institute Foreign Language Center
Presidio of Monterey, CA 93944-5506
USA

Notes

Applied Language Learning
Defense Language Institute
Foreign Language Center
Presidio of Monterey, CA 93944-5006

PB-65-00-1
United States Army
PIN: 077 508 1/N 000